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IBM MAINTINANCE DIAGROSTIC PRUGRAM FOR THE 1800 SYSTEM 1054/55 FUNCTION TEST

PART NO. 2196360

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| | | |
| | | · |
| 1. | PURPOS | S E |
| | PAPER- | INCTION TEST IS DESIGNED (1) TO TEST FOR PROPER OPERATION OF THE TAPE STATUS INDICATORS AND (2) TO TEST FOR ACCURATE DATA HANDLING PAPER-TAPE PUNCH WHEN OVERLAPPED WITH |
| | OTHER TAPES | ELEMENTS OF THE 1800 SYSTEM. THIS TAPE MAY ALSO BE USED TO REPRODUCE |
| 2. | PREREC | DUISITES |
| | 2.1 | PRUGRAM PREREQUISITES |
| | | THIS PROGRAM MUST RUN UNDER CONTROL OF THE DIAGNOSTIC MONITOR. |
| | | THE DIAGNOSTIC MONITOR PROGRAM USES 2,047 STDRAGE WORDS, AND THIS |
| | | PROGRAM USES 741 STORAGE WORDS. |
| | 2.2 | EQUIPMENT PREREQUISITES |
| • | | A.PAPER-TAPE READER ANO/OR PAPER-TAPE PUNCH. |
| 3. | USE PR | OCEOURE |
| | 3.1 | PROGRAM LOADING |
| | | STANDARD LOADING PROCEDURE AS DESCRIBED IN THE DIAGNOSTIC MONITOR USE PROCEDURE. |

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3.2 PROGRAM OPERATION

STANDARD MONITOR OPERATING PROCEDURES APPLY.
THESE PROCEDURES ARE SUMMARIZED HERE. SEL DM USE PROCEDURE FOR OETAILS.

- I. CLEAR STORAGE
 2. LOAD OIAGNUSTIC MONITOR
- 3. SELECT MODE OF EXECUTION
 4. SELECT MONITOR CONTROL OPTIONS, IF DESIRED
- 5. SELECT PROGRAM OPTIONS, IF NEEDED,

TABLE O PROGRAM CONTROL FUNCTION TABLE 1 ROUTINE SELECT FUNCTION TABLE 3 OATA ENTRY FUNCTION

6. INSTRUCT MONITOR TO EXECUTE

TABLE 0 CONTROL FUNCTION

| ************* | |
|--|-------|
| 1. SET FUNCTION OF IN SENSE/PROGRAM SHITCHES O AND 1. | |
| SENSE/PROGRAM • 2. SET PID IN SENSE/PROGRAM SWITCHES 2 THROUGH 7. | |
| • 0 1 2 3 4 5 6 7 • 3. SET DESIRED CONTROL OPTIONS IN DATA ENTRY SWITCHES (| J-15. |
| 4. PRESS CONSOLE INTERRUPT. | |
| • 0 0 0 0 0 1 0 0 • | |
| *************************************** | |
| OATA ENTRY SWITCHES | • |
| • 0 1 2 3 4 5 6 7 B 9 10 11 12 13 14 15 • | • |
| • | • |
| A DEALTH DARED TAVE IN DEADED | _ |
| TO COURSE OF THE PROPERTY OF T | |
| • 1MANUAL TAPE ALIGNMENT IN READER | • |
| • 1REALIGN PAPER TAPE IN READER • 1MANUAL TAPE ALIGNMENT IN READER | |

TABLE 1 ROUTINE SELECT FUNCTION

| SENSE/PROGRAM • 2. SET 0 1 2 3 4 5 6 7 • 3. SET | FUNCTION OI IN SENSE/PROGRAM SWITCHES O AND 1. PIO IN SENSE/PROGRAM SWITCHES 2 THROUGH 7. DESIRED ROUTINE NUMBER IN DATA ENTRY SWITCHES 0-15 S CONSOLE INTERRUPT. | • |
|--|---|---|
| OATA ENTRY SWITC 0 1 2 3 4 5 6 7 B 9 10 11 | | |
| • | O O 1 ROUTINE 1 PUNCH O I O ROUTINE 2. READ O 1 1 ROUTINE 3. READ-PUNCH-COMPARE 1 C O ROUTINE 4. REPRODUCE PAPER TAPE 1 O 1 ROUTINE 5. PUNCH DATA (TABLE 3) O O U EXIT FRUM RTN 4 OR 5 AND RESTART | |
| | | |

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TABLE 3 OATA ENTRY FUNCTION

...... . 1. SET FUNCTION 11 IN SENSE/PRUGRAM SWITCHES 0 AND 1. SENSE/PROGRAM . 2. SET PIO IN SENSE/PROGRAM SWITCHES 2 THROUGH 7. 0 1 2 3 4 5 6 7 . 3. SET DESIRED PUNCH DATA IN DATA ENTRY SWITCHES 0-15. . 4. PRESS CUNSOLE INTERRUPT. . I 1 0 0 0 1 0 0 . NOTE -- EACH HALF WORD INCLUDES TAPE CHANNELS 8-1 RESPECTIVELY. . DESCRIPTION OATA ENTRY SWITCHES * 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 *

ONE DATA WORD TO BE PUNCHED

X X X X X X ALTERNATE DATA WORD TO BE PUNCHED

PROGRAM HALTS

* X X X X X X X X X

THIS PROGRAM HAS NO HALTS.

PROGRAM TERMINATION

- A. STANDARO MUNITUR TERMINATION
- B. PREGRAM CONTROL FUNCTION

TEST 4 AND 5 ARE NOT NORMALLY RUN IN SEQUENCE WITH TESTS AND. THEREFORE, WILL NOT TERMINATE. THE PROGRAM WILL NORMALLY TERMINATE AFTER ROUTINE 3 HAS BEEN EXECUTED.

4. PRINTCUTS

4.1 STATUS MESSAGES

PID MIO RID RAO MODIFIFR*S

0400 A001 000X

THE PAPER TAPE TEST RECORD IS ASSUMED TO BE PROPERLY ALIGNED IN THE READER AT THIS TIME. THIS MESSAGE IS RECEIVED ONLY AFTER OPERATOR SPECIFICATION OF REALIGN TAPE OPTION.

ERROR PRINTOUTS

PID MID RIO RAD WAS S/B C400 E001 000X XXXX XXXX 0X00

OSW ERROR AFTER READER-CONTROL COMMANO

0400 E002 OCOX XXXX XXXX 6X00

OSW ERROR AFTER PUNCH COMMAND

0400 EC03 000X XXXX XXXX 0F00

DSW ERROR AFTER READER-CONTROL AND PUNCH COMMANOS

0400 E004 OOOX XXXX XXXX CXOD

DSW ERROR WHEN CHECKING FOR READER-READY

OATE 28FFB66 DIMAY66 EC NO. 415120 415120A

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0400 E005 000X XXXX XXXX 0X00

OSW ERROR WHEN CHECKING FOR PUNCH-READY

0400 E006 000X XXXX XXXX 4000

READER SERVICE-REQUEST OSW ERROR

0400 E007 CDOX XXXX XXXX 1000

PUNCH SERVICE-REQUEST OSW ERROR

04D0 E009 000X XXXX XXXX 5000

OSW ERROR WHEN PUNCH AND READER INTERRUPTS RECEIVED AT SAME TIME

0400 E009 000X XXXX XXXX X00D

DSW ERROR WHEN FIRST INTERRUPT WAS RECEIVED. AT THIS TIME BOTH THE READER AND THE PUNCH ARE BEING RUN UNDER RACE CONDITIONS. THE OSW FOR THE DEVICE THAT INTERRUPTS FIRST IS ANALIZED FIRST. ANY ERROR WILL BE PRINTED AS AN EODS. SIMILARLY FOR THE SECOND INTERRUPT. ANY ERROR WILL BE PRINTED AS E010.

0400 E010 000X XXXX XXXX X000

OSW ERROR WHEN FIRST INTERBUPT WAS RECEIVED. AT THIS TIME BOTH THE READER AND THE PUNCH ARE BEING RUN UNDER RACE CONDITIONS. THE DSW FOR THE DEVICE THAT INTERRUPTS FIRST IS ANALIZED FIRST. ANY ERROR WILL BE PRINTED AS AN EODS. SIMILARLY FOR THE SECOND INTERRUPT. ANY ERROR WILL BE PRINTED AS E010.

0400 E011 000X XXXX XXXX 0X0D

NO READER INTERRUPT RECEIVED. (LAST DSW SENSED IMMEDIATELY AFTER READER-CONTROL COMMANO 1

0400 E012 000X XXXX XXXX 0X0D

NO PUNCH INTERRUPT RECEIVED (LAST OSW SENSED IMMEDIATELY AFTER READER-CONTROL COMMAND }

0400 E013 000X XXXX XXXX OF00

NO PUNCH OR READER INTERRUPT (LAST DSW SENSED IMMEDIATELY AFTER READER-CONTROL AND PUNC COMMANOS)

0400 E014 000X XXXX XX00 XX00 B080

READ/COMPARE ERROR (RDR BUFFER CHANGED) DATA IXXDO) PRINTED AS ENTERED IN CORE - CHANNELS 8-1 RESPECTIVELY

0400 E015 000X XXXX XX00 XX00 B9B0

READ/COMPARE ERROR (ROR BUFFER UNCHANGED) OATA IXXOO) PRINTED AS ENTERED IN CORE - CHANNELS 8-1 RESPECTIVELY

OATE 28FEB66 OLMAY66 EC NO. 415120 415120A

PRUG ID 0804-PAGE 2 A

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04DD F016 DCD4 XXXX XXXX D00D XXDD

READER-DSW READ FRROR WHEN REPRODUCING TAPES. IF TAPE STOPPED, THE FIRST CHARACTER BEYOND THE READ STATION WAS PERHAPS IMPROPERLY READ. THIS CHARACTER HAS NOT AS YET BEEN PUNCHED. BACK THE READER UP ONE CHARACTER AND PRESS START ON THE P-C. DATA (XXOOI PRINTED AS ENTERED IN CORE - CHANNELS 8-0 RESPECTIVELY.

D4DO E017 000X XXXX XXXX EX4D

WRITE STORAGE PROTECT SWITCH IS ON.
A READER STORAGE PROTECT ERROR SHOULD HAVE BEEN EGRCED. CHECK IE

FIRST SECOND
READ READ
D4DD E018 OODX XXXX XXD0 XXD0

CONSECUTIVE READ ERROR DATA (XXDD) SHOULD AGREE.

D4DD E019 000X XXXX XX00 YY00

THE PROGRAM COULD NOT ALIGN THE TAPE IN THE READER IN THE LAST 500 CHARACTERS.

THE PROBLEM IS,

- A. OPEN DATA CHANNEL(S). XXXX SHOULD BE FEOC, WHICH IS THE CHARACTER THAT WOULD BE PLACED IN CORE BY READING AN ALL-BITS CHARACTER. ANY MISSING BIT(S) INDICATE THE OPEN DATA CHANNELISI.
- B. SHORTED DATA CHANNEL(S). YYOO SHOULD BE OOCO, WHICH IS THE CHARACTER THAT WOULD BE PLACED IN CORE BY READING A NO-BITS CHARACTER. ANY BIT(SI PRESENT INDICATE THE SHORTED CHANNEL(SI.
- C. IF BOTH XX00 AND YY00 ARE CORRECT.
 - I. THE TAPE IS NOT IN THE READER CORRECTLY. OR
 - 2. THE READER CANNOT READ THE FIRST 8 CHARACTERS PROPERLY. IF SO, TRY ONE OF THESE,
 - A. TRY RUNNING THE REPRODUCE TAPE ROUTINE IROUTINE 4).

 B. TRY MANUALLY ALIGNING THE TAPE IN THE READER. THEN
 SPECIEY THE MANUAL TAPE ALIGNMENT OPTION (TABLE DI
 AND RESTART THE PROGRAM.

5. COMMENTS

THE EUNCTION TEST CONSISTS OF THREE NURMAL ROUTINES AND TWO OPTIONAL ROUTINES. NORMALLY, ROUTINES ONE THROUGH THREE ARE RUN IN ORDER. ALL ROUTINES ARE DESCRIBED IN PARAGRAPHS 5.1 THROUGH 5.5.

THE FUNCTION TEST.

A. CHECKS DSW FOR PROPER BITS BFFORE ISSUING WRITE IPUNCHI OR CONTROL IRLADER) COMMANDS. IBM MAINTENANCE DIAGNUSTIC PROGRAM FOR THE 18DO SYSTEM

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- . CHECKS DSW FOR CORRECTNESS AFTER XIO INSTRUCTION.
- C. CHECKS FOR INTERRUPT FROM DEVICE WITHIN SPECIFIED TIME LIMIT.
- D. CHECKS DSW AFTER INTERRUPT IS RECEIVED.
- 5.1 ROUTINE NO. I IPUNCH TESTI

TEST NO. I CHECKS THE OPERATION OF THE PAPER-TAPE PUNCH WHILE PUNCHING TWO TEST RECORDS. THE RECORD INCLUDES A RIPPLE PATTERN AND AN ALL-CHARACTER PATTERN. IREFER FIGURE 11.

5.2 ROUTINE NO. 2 IREADER TEST)

THIS TEST CHECKS THE OPERATION OF THE PAPER TAPE READER WHILE READING ONE RECORD PRODUCED BY THE PUNCH TEST. THE TAPE IS NORMALLY AUTOMATICALLY ALIGNED IN THE READER BY READING EIGHT CONSECUTIVE CHARACTERS CORRECTLY. A MESSAGE IS PRINTED WHEN THE TAPE IS PROPERLY ALIGNED. IF DESIRED, THE OPERATOR CAN MANUALLY PLACE THE TAPE IN THE READER ON THE EIRST CHARACTER OF THE RIPPLE PATTERN AND SPECIFY THE MANUAL ALIGNMENT OPTION AS IN TABLE O. THE TAPE MAY ALSO BE REALIGNED IN THE READER AT ANY TIME.

EACH CHARACTER READ IS COMPARED WITH A WORD IN STORAGE. AN UNEQUAL COMPARE WILL CAUSE AN ERROR TYPEOUT. SEE 4.7. THERE WILL BE BE ONE ERROR TYPEOUT FOR EACH READ/COMPARE ERROR.

THESE ERROR PRINTOUTS MAY INDICATE THE TAPE IS NOT IN THE PPUPER PUSITION IN THE READER. THE TAPE MAY BE MANUALLY ADJUSTED IN THE READER OR THE OPERATOR MAY SELECT REALIGN TAPE. ITABLE 0)

5.3 ROUTINE NO. 3 (PUNCH/READ/COMPARE TESTI

THIS TEST CHECKS THE FUNCTION AND RELIABILITY OF THE PAPER TAPE READER AND PUNCH WHEN OPERATED TOGETHER. BOTH DEVICES ARE OPERATED AT THE SAME SPEED. THE DATA READ IS COMPARED WITH THE DATA PUNCHED IN A NEW TAPE. THIS TEST ALSO HAS THE TAPE ALIGNMENT ERATURE OF TEST NO. 2. THE TEST IS COMPLETE AFTER ONE RECORD HAS BEEN PROCESSED.

5.4 ROUTINE NO. 4 IREPRODUCE-TAPES TEST)

THE OPERATOR HAS THE OPTION OF REPRODUCING ANY TAPE. THE OPERATOR MUST SPECIEY HALT ON ERROR OPTION IN MUNITOR CONTROL TABLE C. AGAIN, ALL DEVICE STATUS CHECKING DDNE IN 1ESTS MOS. I AND 2 IS INCLUDED IN THIS TEST. ALSU, A DSW ERROR WHEN READING THE TAPE WILL CAUSE A DELAY DE THE PROGRAM UNTIL THE OPERATOR CAN INTERVENE TO VERIFY THAT DELAY OF THE PROGRAM UNTIL THE OPERATOR CAN INTERVENE. WHEN AN ERRUR OTHER THAN EDIG IS PRINTED PRESS START AND THEN VERIEY THAT THE PROPER PUNCHES ARE OBTAINED. SEE SPECIFIC ERROR MESSAGE FOR AID IN INSTRUCTIONS.

5.5 ROUTINE NO. 5 (PUNCH ECN 3 SWITCH SETTINGS)

THIS ROUTINE PUNCHES THE DATA ENTERED VIA FUNCTION LEVEL 3. ALTER-NATELY THE FIRST HALE THEN THE SECOND HALF OF THE WORD. (TABLE 3)

OATE 28FEB66 OIMAY66 EC NO. 41512D 415120A PROG ID 0804-0

DATE 26FEB66 OIMAY66 EC NO. 415120 415120A

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APPENDIX

6.1 EDIT PROCEOURE

THE FOLLOWING EDIT PROCEOURE IS FOR CARO INPUT. THE EDIT PROCEDURE FOR PAPER TAPE INPUT IS LOCATED IN THE PAPER TAPE EDIT CARDS OR UPDATING EXISTING EDIT CARDS. IF IT IS NECESSARY MUST BE THE LAST CARDS IN THIS PROGRAM DECK. THE FOLLOWING FORMS ARE PROVIDED TO ALD IN MANUALLY PREPARING THESE EDIT CARDS OR UPDATING EXISTING EDIT CARDS. IF IT IS NECESSARY TO PREPARE OR MODIFY EDIT CARDS, FILL IN THE NECESSARY DATA IN THE FORMS PRIOR TO PUNCHING THE CARDS. CARD COLUMNS THAT ARE SHADED SHOULD BE LEFT BLANK.

DDEF STANDS FOR DEVICE DEFINITION EDIT FIELD. IT INCLUDES: 1. THE INTERRUPT LEVEL ASSOCIATED WITH THIS DEVICE (USE HEX NOTATION, 00-17).

2. THE ILSW BIT POSITION ASSOCIATED WITH THIS DEVICE (USE HEX NOTATION, O-F).

3. THE CHANNEL ASSIGNED TO THIS DEVICE (0-8). IF THIS IS A DPC DEVICE, PUNCH AN F IN THE CARD COLUMN.

THE LAST EDIT CARD IS THE "ENO EDIT CARD". THE INFORMATION IN THIS CARD INCLUDES: 1. AN "E" IN COLUMN 1.

2. THE PID FOR THIS PROGRAM (COL. 2-3).

3. A TERMINATOR WORD OF "FFFF" (COL. 7-10).

| CAND SEQUENCE NUMBER OF EDIT ENTRIES LEVEL (HEX) CHAMBIEL (OR F) CHAMBIEL (OR F) Agg C | |
|--|----------|
| 26 | # |
| CARO 0 E 0 4 0 0 0 E D 0 C 0 0 0 1 F | ## |
| | 井늬 |
| END E 0 4 9 0 0 1 1 1 1 1 1 1 1 | <u> </u> |
| | |
| | |

CARD O CONTAINS ONE ENTRY ONLY. THIS ENTRY IS THE DEVICE DEFINITION EDIT FIELD (ODEF) FOR THE PAPER TAPE REAGER/PUNCH TO BE TESTED. CARD END IS THE "ENO EDIT CARO". PUNCH EXACTLY AS IS SHOWN.

01 MAY 66 DATE 28 FEB 66 415120A EC 415120

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1054/55 FUNCTION TEST

..... BEGINNING

END OF TAPE

SAMPLE 1055 OUTPUT

DATE 28FEBC6 01MAY66 EC NO. 415120 415120A

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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE IBCO SYSTEM PART NO. 2196358 PAGE 1 1 1054/55 FUNCTION TEST 80400000 1800 DIAGNOSTIC MONITCR 80400010 80400020 TRANSFER VECTOR 80400030 80400040 80400050 0120 BECIN FOU 80400060 300 B0400070 START ECU BEGIN+1 012D ENC EQU START+1 80400080 012E 80400090 C12F LOG EQU END+1 0130 ERROR ECU LOG+1 80460100 0131 REQOV ECU ERROR+1 80400110 0132 RELDV ECU RECOV+1 80400120 0133 HALT EQU RELDV+1 80400130 80400140 80400150 0000 *+2047 86400160 ****************************** 80400170 80400180 DIAGNOSTIC MONITOR CONTROLLEC 80400150 1800 PAPER TAPE TEST 804002C0 ************** 80400210 80400220 PROGRAM STATES TABLE 80400230 80400240 PROGRAM I.D. NO 80400250 07FF 0 0400 PIO DC /0400 0900 0 0000 218 DC **/0000** TEST NUMBER 80400260 RAC CC TEST ADDRESS 80400270 08C1 C 0000 /0C00 0802 0 C006 SHC CC /CC00 FCA 0 - CENTROL 80400280 0803 0 0000 SW1 OC. /0C00 FCN 1 - INITIAL RTN 80400250 FCN 2 - OEVICE GNLY 80400300 08G4 0 0000 SW2 OC. /0000 or. /C00C PUNCH SWS WCRO 80400310 0805 C CCOC Sw3 CC INITIALIZATION ADOR 80400320 PTILZ 0806 1 C86C PTILZ LOCP PROGRAM! AODR 80400330 0807 1 0860 00 ENO PROGRAM AODR 80400340 EPA DC 0808 1 0409 TENO PLSCF CC /0000 MAIN LINE SEC CATL 80400350 0809 C C000 COUNTER ENTRY 80400360 080A 0 C00G /0C00 080B @ FFFF TERM CC /FFFF **TERMINATOR** 80400370 LAST PREGRAM ADDR 080C 1 0AFC PEND 80400380 0800 C 0000 DC 80400390 080E 0 CC00 80400460 080F 0 000C CC 80400410 80400420 0810 C 0000 CC CC 80400430 0811 C 0000 CDEF LC /0C00 DEVICE CEF EOIT FLO 80400440 0812 0 0000 80400450 0813 0 0060 CC 80400460 DC 0614 0 0000 DC 80400470 0815 0 0000 80400480 DC 0816 0 0000 0817 C C000 CC 80400450 0818 0 COOG DC 80400500 0819 C CCCO 80400510 081A U 0000 DC 80400520 0818 0 0000 80400530 EC 80400540 0810 0 0000 80400550 0810 G 0000 80400560 804D0570 B0400580 INTERRUPT ROLTINE 80400590 804006C0 AREA CODE FCR DEVICE IE 80400610 /0CC0 081E C C300 CVA CC 80400620 804006 30 POINT CC /0C0C 081F C 0000 2 XI i+1 80400640 0820 0 6A37 STX 0821 01 CC00C972 XIO L XIOSD SENSE CSW 80400650

IBM MAINTENANCE CIAGNOSTIC PROGRAM FOR THE 18CC SYSTEM PART NO. 2196358 PAGE 1054/55 FUNCTION TEST 0826 01 4F80085D 8SC I3 HANDL-1 80400680 0828 01 F7C0C863 SINT FOR L3 INTEX-3 80400650 082A 01 E780C866 AND 13 INTEX 80400700 082C 01 4C18C84E BSC L PINT3,+-BR IF DSW OK B0400710 082E 01 66000984 LDX L2 NIPES SVC REQ ERROR 80400720 0830 0 701F PDX PINTI 80400730 80400740 0831 0 F031 CINT ECR INTED CK DSW FOR 2 SVC REC 80400750 0832 00 4C0CC000 BSC /0000 BR IF 2ND DCUBLE INT 80400760 L CINT1 STO 80400770 0834 C 202C DSWDI 0835 0 E02D AND INTED 80400780 0836 0 CO2B STO 80400750 CSEID 0837 01 40200847 EXIT IF ONLY ONE REC BSC L DINT4, Z 804008C0 0839 0 0027 LD DSMDI 804C0810 083A 01 4C18C84E BSC L PINT3, +-BR IF DSW OK 80400820 083C 01 6600098E LDX L2 DINE1 80400835 083E 0 7011 MDX PINTI 80400B40 80400850 083F 0 E822 CINT 2 OR CSWID 80400860 0840 0 DO1A DSWIT 80400870 0841 0 F021 ECR INTED 80400880 80400890 0842 01 4C18C84E BSC L PINT3, ← BR IF DSW OK 80400900 0844 01 66000993 LCX L2 DINE2 80400910 0846 0 7009 MDX PINTI 80400920 80400930 80400940 0847 C 1340 CINT4 SLCA 3 C 80400950 0848 0 1001 SLA 80400960 0849 0 DO12 STC BUMRC ZERD IF NO IEC BIT 80400970 084A 01 6700C83F LCX L3 DINT2 SET SECOND INT SW 80400980 084C C 68E6 STX 3 DIATI-1 80400990 084D 0 7009 MDX XIT 80401000 80401010 084E 01 660009A2 PINT 2 LDX L2 DINE6 80401020 0850 01 6700C9AA PINTI LOX L3 BSYES CHECK BLSY CSW NEXT BC401030 0852 G 6886 STX 3 MLSCF 80461040 0853 01 6E0009BF STX L2 XBSYX+1 PRO1 80401050 80401060 0855 0 6200 LDX 80401070 0856 0 6A0F STX 2 INTEX 80401080 80401090 0857 OC 660CCU00 XIT LCX L2 /OCOC 804C11C0 0859 01 4C80C81F BSC I POINT 80401110 ****************************** 80401120 80401130 0858 C C000 DSWIT DC /ccce LAST INTERRUPT DSW 80401140 085C 0 000G SUMR C DC 76,000 80401150 085U 1 0857 XIT 80401160 FANOL DC INTERRUPT BR AOFS 085E 1 0828 SINT 80401170 085F 1 0828 DC SINT 80401180 DC. 086C 1 C831 DINT 80401190 DSWD1 DC 0861 0 0000 /0C00 804012C0 0862 0 C000 CSWIC DC IDENTIFY INT YET EXP 804C1210 80401220 0863 0 5000 INTEC DC /5CCC RDR-PCH SVC REQ EXP 80401230 0864 0 4000 RDR SVC REQ 80401240 CC /4C00 0865 C 1000 PCH SVC REQ /1C00 80401250 INTEX DC 0866 0 0000 /CCCC INTERRUPT EXPECTED 80401260 + 1 = REAGER 804C1270 * 2 = PUNCH 8C4C1280 * 3 = BOTH 80461290 0867 1 0978 RMASK DC READER 804013C0 0868 1 0979 DC XMASK PUNCH 80401310 ****************************** 80401320 80401336 80401340 0869 00 448U012C PTEGN BSI I BEGIN CALL MONITOR 60401350

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EC NO.

CIMAY66

415120A

PROG ID JAFFB66 CIPAY66 PAGE EC NO. 415120 415120A

DSWIT

LDX 13 INTEX

0823 6 E037

DATE

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1054/55 FUNCTION TEST

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| | ADDD OF DED NO | * 80401360 | | | • | | 80402040 80402050 |
|------------------------------------|---|--|-----|---|------------------------------|--|---|
| 086B 1 07FF | DC PIO ADOR OF PID NC | | i | | RTCOLOC RTNI | PUNCH ROUTINE | 80402060 |
| | *************************************** | 80401380 | | 8AF 1 0887 | RTCON OC RTN1 | | 80402070 |
| | INITIALIZATION ROUT | INE 80401350 | | 880 1 08C4 881 1 08CC | OC RTN3 | | 804C2080 |
| | • | 804014 CO | | 881 1 Q8CC 882 1 Q8D7 | DC RTN4 | | 80402090 |
| 0860 0 0000 | PTILZ DC /OCOC ENTRY POINT | SE 80401410 | | 883 1 08F8 | CC RTN5 | | 8C4021C0 |
| 086D 01 C4000802 | LD L SWO CK IF AUTD ALIG | | | 884 1 OAEE | DC PTEN | | 80402110 80402120 |
| 086F 0 1007 | SLA 7 | 80401430 LIGN 80401440 | 08 | 8B5 1 OAEE | OC PTEN | D ENO ROUTINE | 80402130 |
| 0870 0 4810 | esc - SKIP IF NO REAL | 80401450 | | | SHEMP OF /OFO | O SWI COMPARE WORD | 80402140 |
| 0871 0 1009 | SLA S STO L NIST SET ALIGN PATT | | 08 | 886 C COOO | SWCMP OC /OCO | ****** | 80402150 |
| 0872 01 C400CA26 | 210 E 4121 251 45141 1411 | 80401470 | | | * | | 80402160 |
| 0874 01 66000879 | LOX L2 BOSS SET MAIN LINE | SEQ 80401480 | | | • | | 80 40 21 70 |
| 0874 01 00000017 | STX 2 MLSCF + CONTROL FIELD | | | | • | MAINLINE TESTS | 80402180 |
| 0877 01 4C80(86C | BSC 1 PTILZ | SX 80401500 | | | • | | 80402190 80402200 |
| | ************ | ***** 8C401510 80401520 | | | • | TEST 1 - PUNCH TEST | 80402210 |
| | • | 80401530 | | | • | 1521 I - LOUCH 1521 | 80402220 |
| | 8D SS LD DDEF | 80401540 | | 00 (5000305 | RTN11 LCX L1 782 | SET FOR 2 RECORDS | 80402230 |
| 0879 0 C098 | BSC L BUILD-1.+Z BR IF DEVICE M | INE 8C401550 | | 887 00 6500030E | STX 1 WREC | | 80402240 |
| C87A 01 4C28C885 087C 0 62F8 | LDX 2 -8 | 80401>60 | | 889 0 691C 88A 00 65000187 | LOX L1 391 | | 80402250 |
| 087D 01 6E00GA25 | STX 12 COFCT | 80401570 | | 88C 0 69F8 | STX 1 RTN1 | ALLER MENT CHADACTED SE | 864022 6 0 804022 70 |
| JUL 3. 022000 | ************ | | . 0 | 88D 01 44000A8E | RTN1 851 L MARK | = = # 4 5 2 4 | 804022 <i>1</i> 0 804022 80 |
| 087F GO 4489C131 | 80SS2 8SI I RECDY REQUEST DEVICE | * SC 80401590 * 804016C0 | 0 | 188F 0 405E | 8SI XKRD | | 80402290 |
| 0881 1 CAD3 | DC NOPE OEVICE BUSY | * 80401610 | | 8CO 01 4CU00961 | BSC L PUNH RTN1A 851 CRAS | THE TAX DOLLERAN | 80402300 |
| 0882 1 0812 | DC DDEF OC U/A AREA CDCE | * 80401620 | | 18C2 U 4053 | RTN1A 851 CRAS | - | 80402310 |
| 0883 1 C81E | DC TERM | * 8040163 0 | 0 | 18C3 0 70F9 | * | | 86402320 |
| 0884 1 0808 | ****************** | ***** 80401640 | ! | | • | TEST 2 - READER TEST | 80402330 |
| | • | 80401650 | - | | • | THE STATE OF THE SECTION OF THE SECT | 80402 340 804023 50 |
| 0885 0 6107 | LOX 17 INIT XID AREA | CGDES 804016 60 804016 70 | o | 8C4 01 44000A8E | RTNZ ESI L MARK | | 804023£0 |
| 0886 01 C500C970 | ENILE TO TI XICXX | 80401680 | | 08C6 0 4067 | 8SI RRDY | MEMOEN MEMO | 80402370 |
| C888 0 E895 | OR OVA | 80401650 | | 08C7 0 7076 | MDX FEEC RTN2A 851 L RDI | TO TOWN TO SEE | 80402380 |
| 0889 01 05030970 | STO L1 XICXX MDX 1 -2 | 804017C0 | | 08C8 01 440009C0 08C8 0 4048 | BSI CRAS | | 80402390 |
| 0888 0 71FE 088C 0 70F9 | MOX BUILO | 80401710 | | 08C8 C 70F8 | MDX RTN | | 80402400 |
| 0880 0 101) | • | 80401720 | · | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | • | | 80 40 24 1 0 80 40 24 20 |
| 088D 0 1810 | SRA 16 ZERO ROUTINE N | IUMBER 80 401730 80 401740 | | | • | DCU DD + / CMDAPE | 80 40 24 30 |
| 088E 01 04000830 | STO L RID | 80401750 | | | • | TEST 3 - PCH-RD + CCMPARE | 80402440 |
| | * MGRI LDX L2 FIO | 80401760 | · . | | RTN3 851 L MAR | 8UILD NEXT CHARACTER SC | 80402450 |
| C890 C1 660607FF | LD 2 SW1-PID ASSURE PROPER | ENTRY 804C1770 | | 08CC 01 44000A8E 08CE 0 404F | 8SI XKR | | 80402460 |
| 0892 0 C 204 0893 0 0022 | STO SHCMP | 80401780 | | U8CF 0 405E | BSI RRD | Y READER READY SC | |
| 0894 0 1000 | SLA 13 | 80401790 | | 08DU 01 4C0CC94D | 8SC L XFE | | 80402480 804024 50 |
| 0895 0 1800 | SRA 13 | 8040180 0 8 C40181 0 | | 08D2 01 440 009C0 | RTN3A BSI L ROI | THE PERSON OF SOUTHING CO | |
| | BSC Z SET ROUTINE II | | | 08D4 C 4041 | 8SI CRA | | 80402510 |
| 0896 0 4820 | BSC Z SET RDUTINE II STO 2 RIO-PIÙ | 80401830 | ; c | 08U5 0 70F6 | MDX RTN | • | 80402520 |
| 0897 C D201 | \$ 210 2 10 110 | 804 C18 40 | | 0004 0 0000 | WRECK DC /OC | 00 | 80402530 |
| 0896 01 6580(800 | LDX 11 RIO UPDATE THE RIT | | | 0806 0 0000 | * | | 86402540 |
| 089A C 4818 | 8SC +- | 80401860 | • | | • | TEST 4 - REPRO PAPER TAPE | 804025 50 80402 56 0 |
| 0898 C 7101 | MDX 1 1 INCEX THE ROUT | TINE NC 80401870 804018 80 | | | • | | 80402570 |
| | * STX E1 RID SET RTN NC AN | | | 08D7 C1 C400C803 | RTN41 LD L SW1 | 1.+- BR IF NC EXECUTE RTN | 80402580 |
| 089C 01 6D00C800 | STX L1 RID SET RTN NC AND LD L1 RTCON-1 | 80401900 | | 08D9 C1 4C180890 | BSC L MGR SLA 16 | 17. On 11 140 Evenant | 80402590 |
| C89E 01 C500C9AE 08AU 0 D202 | STO 2 RAD-P10 | 80401910 | | 0808 0 1010 08DC 01 04000A67 | STO L XCH | AR PUNCH FEED HOLE 1"T | 80402600 |
| JONG O DECE | 4 | 80401920 | | OUDE OF GACCOUNT | • | | 804026:0 |
| UBA1 0 6300 | LOX 3 0 RESTORE CHAR | | | 080E 01 C400C803 | RTN4 LO L SW1 | | 80402620 804 0 26 30 |
| 08A2 01 6F00CA26 | STX LD NIST | 8040 1940 804 01950 | | OBEO C FODS | EOR SWC | | 804026 40 |
| 0844 01 6F00CA96 | STX L3 DULP+1 | 8040 1960 | | 08E1 01 4C200890 | 8SC L MGR 8SI XK9 | | |
| 08A6 0 6301 | LDX | 80401970 | | 08E3 0 403A | 851 XK9 851 RRD | 50 | 804026£0 |
| 08A7 01 6F00CA94 | • | 80401980 | | 08E4 0 4049 08E5 01 4C00C94D | 8SC L XFE | | 8C402670 |
| 0849 00 67000187 | LDX L3 391 SET RECGRD LE | NGTH 80401950 | | U0E3 U1 76006770 | • | - | 80402680 |
| 08A8 01 6F00C8D6 | STX L3 WRECK | 80402 00 0 | | 08E7 01 CC000976 | RTN44 X10 L XIC | | 80402650 |
| 3000 00 000000 | * | 80402010 UTINE 8040202G | | 08E9 01 C4000A66 | LD L CAF | PLACE CHAR READ IN | 804027 60 80402 710 |
| 08AD 01 4D80C8AE | BSC 11 RTCON-1 BR TD USER RO | 80402030 | | 08E8 01 D400CA67 | STO L XC | AR + CUTPUT AREA | 00 70 2 7 2 9 |
| | • | | İ | | | | |
| | | | | DATE 28FE866 | 01MAY66 | | PROG 10 0804-0 |
| 0A1E 28FEB66 | C1MAY6E | PROG ID 0804-0 | | DATE 28FE866 EC NO. 415120 | 415120A | | PAGE ZA |
| EC NO. 415120 | 415120A | PAGE Z | | | | | |
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|----|---|--|---|---|-----|--|---|-----|---|---|---|---|---|---|---|---|---|---|-------|---|-----|---|---|-----|---|---|
| _ | | | | | | | | | | - | - | - | • | • | • | • | • | • | • . • | • | . ' | • | • | . , | • | • |

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|-------------------|----------------------|--------------|--------------|----------------|----------------------------|----------------------------------|----|--|---------|
| 054/55 | FUNCTION 1 | res T | | | | | | | |
| | 10A0 | | SLT | | 32 | | | 80402 720 | |
| | CC00C972 4C10C8DE | | X IO B SC | L | XICSO RTN4+- | SENSE DSW BR IF NC DSW ERRORS | | 80402730 80402740 | |
| 8F2 0 | £116 | * | LDX | 1 | /0016 | PRINT RCR ERRCR | | 80402750 80402760 | |
| 8F3 0I | 740 ICA61 | | MDX | Ł | EMESG,1 | TRINT ADA CANON | | 80402770 | |
| | 44000A4C 74FF0A61 | | 128 XDM | L | PRDSW EME SG +−1 | | MC | 8C4027 8 0 804027 90 | |
| 8F9 0 | 4034 | * | BSI | | RRDY | READER READY | sc | 80402800 80402810 | |
| 8FA 0 | 7043 | | ₽DX | | FEED | CONTROL READER | 30 | 80402820 | |
| | | * | MDX ***** | *** | RTN4 ********* | ********* | * | 80402830 80402840 | |
| | | * | | | | | | 80402850 | |
| | | * | | | ROUTI | NE FIVE | | 804028 <i>€</i> 0 804028 <i>7</i> 0 | |
| | | * | | | PUNCH 8IT | SHITCH DATA | | 80402880 80402890 | |
| | | * | | _ | | SHITOH UNIA | | 80402900 | |
| | C40C0803 4C18C890 | RTNSI | LD 8SC | L | SW1 MGR1++- | 8R IF NC EXECUTE RTA | | 80402910 804029 <i>2</i> 0 | |
| BFF 0 | 6300 7002 | | LDX | | 0 | | | 80402930 | |
| 00 100 | 01000000 | RTN5A | | L3 | RTN5B /0000 | | | 80402940 80402950 | |
| 03 01 | C400C805 1300 | RTN5 E | LD SLA | L ₃ | SW3 O | | | 80402960 80402970 | |
| 06 01 | D400CA67 | | STC | L | CHAR | | | 80402980 | |
| 008 0 109 C | COF9 EOOB | | LD CMP | | RTN5A+1 O | | | 80402990 80403000 | |
| OA G | 6300 | | LDX | 3 | 0 | | | 80403010 | |
| 60 B O | 7001 6308 | | MDX LDX | 3 | RTN5D 8 | | | 8040302D 80403030 | |
| 000 0 00 0 0 1 | 68F4 C400C803 | RTN5C | STX | L L | RTN5A+1 SW1 | | | 80403 040 80403050 | |
| 910 0 | FDA5 | | EOR | | SHCMP | | | 804C3060 | |
| 911 01 | 4C20(890 4U0A | | BSC 8S1 | L | MGR1 •Z XKROY | BR IF END THIS RTN | | 8040307D 80403080 | |
| 914 0 | 704C | | ₽DX | | PUAH | | | 80403050 80403160 | |
| 15 0 | 0000 | Č | DC | | 0 | | | 80403110 | |
| | | * | **** | ***1 | ***** | ******** | | 80403120 80403130 | |
| | | * | | | TEST | 5 - PUNCH BIT SWS | | 8040314D 80403150 | |
| | | * | | | | | | 804031 60 80403170 | |
| | | * | | | CGUNT | CHARACTERS ROUTINE | | 80403180 80403190 | |
| 916 0 | | CRASE | | , | /0000 | IS RTN COMPLETE | SE | 804032C0 | |
| 19 0 | 74FFC8D6 7C02 | | MDX MDX | L | WRECK+-1 RASH | •. | | 80403210 80403220 | |
| 14 01 | 40000890 | * | 850 | L | FGR1 | BR - ENC CF RECCRD | | 80403230 80403240 | |
| 10 01 | 40800916 | # RASH | BSC | I | CRASH | RET IF RCD NOT CMPLT | sx | 80403250 80403260 | |
| | | ***** | *** | **** | ***** | ******* | | 80403270 804C328D | |
| | | * | | | | | | 80403290 80403300 | |
| | | * | | | PLNCH | READY ROUTINE | | 80403310 | |
| DIE 0 | 0000 | * XKRDY | | | /6000 | | SE | 80403320 86403330 | |
| 1F 0 | 0852 0062 | | XIO STO | | XIOSD OSWAS | SENSE AND SAVE DSW | | 80403340 80403350 | |
| | | • | | | · | | | 80403360 | |
| 921 0 | E057 | • | ANO | | XMASK | REMOVE RDR ARDY BIT | | 804033 70 8040 338 0 | |
| 922 01 | 4C98C91E | | BSC | I | XKRDY.+- | BR IF OSW OKAY | SX | 80403350 | |
| | | | | | | | | | |

18M MAINTENANCE DIAGNUSTIC PROGRAM FOR THE 18CC SYSTEM 1054/55 FUNCTION TEST

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| | _ | | • | | | _ | | | 804034C0 |
|----------------------|-----|------------------|---------|-------------|-----|-----------------|-------------------------|----|----------------------------------|
| 0924 | | 1007 | | SLA | | 7 | PRINT DSW ERROR | | 80403410 |
| 0925 | | 6105 | | FOX | 1 | 5 | | | 80403420 |
| 0926 | | C85C | | LCO | | DSHAS | | | 804C343C |
| 0927 | | E057 | | AND | | POFF | | | 80403440 |
| 0928 | | 1800 | | RTE | | 16 | | | 80403450 |
| 0929 | υI | 4400CA4C | | BSI | L | PROSW | | HC | 80403460 |
| 0020 | | 44000475 | • | 007 | | TINC | DALCE BEEFER DECLERY | | 80403470 |
| 0920 | _ | 4400CA7F 70F1 | | BSI MDX | L | TIME XKRDY+1 | PAUSE BEFCRE RECHECK | SC | 80403480 |
| 0 920 | U | 7071 | **** | | *** | | ********* | | 80403450 |
| | | | * | **** | | | | | 804035C0 |
| | | | * | | | | | | 80403510 80403520 |
| | | | | | | R F.A | DER READY ROUTINE | | 80403530 |
| | | | | | | | TOOL WELDT WOOT THE | | 80403540 |
| 092E | 0 | C000 | RRDY | CC | | /0000 | | SE | 80403550 |
| 092F | 0 | 0842 | | XIO | | XICSD | SENSE AND SAVE OSW | | 80403560 |
| 0930 | 0 | D052 | | STO | | OSWAS | | | 80403570 |
| | | | * | | | | | | B0403580 |
| 0931 | 0 | E046 | | AND | | RMASK | REMOVE FCH ARDY BIT | | 80 40 35 90 |
| | | | * | | | | | | 80403600 |
| 0932 | 01 | 4C98092E | | 8 S C | 1 | RRDY ++- | 8R IF DSW CKAY | SX | B0403610 |
| | | | * | | | | | | 80403620 |
| 0934 | | 1005 | | SLA | | 5 | PRINT DSW ERROR | | 80403630 |
| 0935 | | 6104 | | LDX | 1 | 4 | | | 80403640 |
| 0936 | - | C84C | | LDD | | OSHAS | | | 80403650 |
| 0937 | | E046 | | AND | | ROFF | | | 80 40 36 €0 |
| 0938 | | 1800 | | RTE | _ | 16 | | | 804D3670 |
| 0 93 9 | CI | 4400CA4C | _ | BSI | L | PROSW | | MC | 80403680 |
| | | 44000135 | • | | | T 1 4/5 | 041105 055505 050115011 | | 80403690 |
| | | 4400CA7F | | BSI | L | TIPE | PAUSE BEFCRE RECHECK | SC | 80403700 |
| 093D | U | 70F1 | **** | MOX | | RR DY +1 | ******** | | 80403710 |
| | | | * | * * * * * | +++ | | *********** | | 80403720 |
| | | | • | | | CON | TROL READER ROLTINE | | 80403730 |
| | | | | | | CON | THUE READER RUCTINE | | 80403740 80403750 |
| 093E | 0 | 6101 | FEED | LDX | 1 | 1 | SET REACER INTRPT | | 80403760 |
| | | 60000866 | | STX | _ | INTEX | * EXPECTED | | 80403770 |
| | | 6DOUC9AB | | STX | _ | BSYES+1 | 27.20125 | | 80403780 |
| _ | | | * | | | | | | 80403790 |
| 0943 | 0 | 6830 | | XIO | | XICFO | FEEO READER | | 804C38C0 |
| | | | * | | | | | | 804C3810 |
| 0944 | 0 | C82D | | XIO | | XICSD | SAVE BUSY DSW | | 80403820 |
| 0945 | 0 | DO 3 B | | STO | | OSMBY | | | 80403830 |
| | | | * | | | | | | 80403840 |
| 0946 | 01 | 44000A7F | | 881 | L | TIPE | PAUSE FOR INTRPT | SC | 80403850 |
| | _ | | • | | | | | | 804C3860 |
| 0948 | - | 6111 | | LCX | 1 | /0C11 | PRINT NC INTRPT ERR | | 80403870 |
| 0949 | - | C837 | | LOD | | OSWBY | | | 80403880 |
| 094A | | E033 | | AND | | ROFF | | | 80403B90 |
| 094B | | E82F | | OR | | DSWR2 | | | 80403900 |
| 094C | U | 7052 | **** | MOX | | DINES | **** | | 86403910 |
| | | | ***** | * * * * * * | *** | | ********* | | 80403920 |
| | | | • | | | Oliv | CU AND COURDED & FLARED | | 80403930 |
| | | | • | | | PUN | CH AND CONTROL READER | | 80403940 |
| | | | | | | | ROUTINE | | 80403950 |
| 940 | 01 | 6500C834 | XELEL | 1 Fix | . 1 | DINTI | RESTORE DOUBLE 1.T | | 80403960 80403970 |
| | | 60000833 | A. F.F. | STX | | OINT1-1 | * SWITCH | | 80403980 |
| ·• | - • | | • | | | | | | 80403960 |
| 0951 | 0 | 6103 | | LDX | 1 | 3 | SET DOUBLE INTRPT | | 80404000 |
| | | 6000C866 | | STX | | INTEX | * EXPECTED | | 80404010 |
| | _ | 6D0009A8 | | STX | | BSYES+1 | | | 80404020 |
| 952 | ~ 1 | | | | | | | | 80404030 |
| 952 | • • | | - | | | | | | |
| 952 | | 0819 | • | X IO | | XICXX | FEEO ANO PUNCH | | 80404040 |
| 0952 0954 | 0 | 0819 081C | • | X 10 | | XICXX | FEED AND PUNCH | | 80404040 80404050 |
| 0952 0954 0956 | 0 | | • | | | | FEED AND PUNCH | | 80404040 80404050 80404060 |

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1054/55 FUNCTION TEST

1054/55 FUNCTION TEST

| | | | | | | | | 80404080 |
|----------------------|-----|----------------------|--------|------------|------|-------------|---|--|
| 0959 0 | | 0027 | 9 | STO | | DSWBY | | 80404090 |
| | | | • | | | | PAUSE FOR INTERRUPT | SC 804041C0 |
| 095A C | 1 4 | 4000A7F | | 8 S I | L | TIME | PACSE PER INTERMOT | 80404110 |
| | | | * | | | | PRINT NO INTRPT ERR | 80404120 |
| 0950 0 | | 6113 | | LOX | 1 | /CC13 | SKIKI ME IMINEL CHE | 80404130 |
| 095D 0 | | 023 | | LO | | DS#8Y | | 80404140 |
| 095E 0 | | 800 | F | RTE | | 16 | | 80404150 |
| 095F 0 | | COID | | LO | | OS NR X | | 80404160 |
| 0960 C | | 703E | , | MDX | | DINES | | |
| 0,000 | | . • | ****** | **** | *** | ***** | ******** | 80404180 |
| | | | * | | | | | 86404190 |
| | | | • | | | PUNC | H ROUTINE | 80404200 |
| | | | • | | | | | 80404210 |
| 0961 0 | ١ ، | 6302 | PUNH I | LOX | 3 | 2 | SET PUNCH INTRPT | 86464220 |
| 0701 | | 5F00C866 | | STX | L3 | INTEX | * EXPECTEO | |
| | | 6F00C9A8 | | STX | L3 | 8SYES+1 | | 86404230 |
| ט דסלט | | 01000 | | - | | | | 8C404240 |
| | | 0809 | | XIC | | XICXX | PUNCH CHARACTER | 80404250 |
| 0966 | , , | 0007 | * | | | | | 80464260 |
| 00/7 0 | | C 0 0 A | | XIG | | XICSO | SAVE BUSY OSW | 80404270 |
| 0967 | | 680 ▲ | | STO | | OS+8Y | | 80464280 |
| 0968 | , | C018 | * | | | | | 80404290 |
| | | 4400017E | • | BSI | Ł | TIME | PAUSE FOR INTERRUPT | SC 80404300 |
| 0969 | 91 | 4400CA7F | | 031 | • | • • • • • | | 80404310 |
| | | | • | LOX | 1 | /CC12 | PRINT NO INTRPT ERR | 80404320 |
| 0968 | | 6112 | | | • | E3h8Y | • | 80404330 |
| 0960 | | C814 | | LDD AND | | POFF | | 80404340 |
| 0960 | | EC11 | | | | OShX2 | | 80404350 |
| 096E (| - | E800 | | GR | | DINES | | 8 0404360 |
| 096F | C | 702F | | MCX | | | ******* | * 80404370 |
| | | | | **** | | ****** | | 80404380 |
| | | | * | | | | | 80404390 |
| | | | * | | _ | | | 8040 44CO |
| 0970 | | C000 | | 855 | E | we | PUNCH ICCC | 80404410 |
| 0970 | 1 | 0A67 | XICXX | | | XCHAR | PUNCH ICCC | 80404410 804 04420 |
| 0971 | r | C100 | | DC | | /0100 | SENSE OSW ICCC | 80404430 |
| 0972 | | 000C | XICSC | | | /0C0C | SENSE OSM TECE | 80404440 |
| 0973 | | 0761 | | DC | | /0701 | | 80404450 |
| 0974 | | 0000 | XIOFC | DC | | /0C00 | FEEO IOCC | 80404460 |
| 0975 | | 0410 | | DC | | /C41C | 1566 | 804044 <i>6</i> 0 804044 <i>7</i> 0 |
| 0976 | - | C A 6 6 | XIGRR | DC | | CARED | READ IOCC | 80404480 |
| 0977 | | C20C | | DC | | /0200 | | 80404060 |
| 0978 | - | FEFF | RMASK | εc | | /FEFF | READER MASK | 80404500 |
| 0979 | | FBFF | XMASK | DC | | /FBFF | PUNCH MASK | 80404450 804045C0 80404510 8C404520 |
| 097A | | FFFF | | nc | | /FFFF | MINUS ONE | 8C 404520 |
| 0978 | | CCGO | DSWR 2 | CC | | /0C0C | ROR BUSY EXP DSW | 80404530 |
| U97C | | C300 | CSWX2 | ЭC | | /C30C | PCH BUSY EXP DS% | |
| 0970 | | OFOU | CSWRX | | | /0F00 | DOUBLE BUSY OSM EXP | 80404540 |
| - | | 0100 | POFF | CC | | /010C | | 80404550 |
| 097E 0 97F | | 0400 | POFF | эc | | /0400 | | 80404560 |
| | | 0000 | | CC | | /0000 | | 80404570 |
| 0980 | | | CSWBY | | | /CC00 | LAST BUSY DSW | 80404580 |
| 0981 | | 0000 CO 00 | 23401 | 20 | | /CC0C | NOT USEC | 80404590 |
| 0982 | | | CSWAS | 20 | | 10000 | LAST DSMER PRINTED | 804046CO |
| 0983 | U | COOC | **** | * * * * * | **** | ******* | ******** | *** 80404610 |
| | | | | | | | | 00404080 |
| | | | • | | | PRI | NT DSW ERRERS DETECTED | D 80404630 |
| | | | | | | | OURING INTERRUPT | 804040 |
| | | | I | | | | | 804 C4650 |
| | | | NIPES | IDY | 1 | 1 8SYES+1 | PRINT OSW ERROR | 804046£0 |
| 0984 | 01 | 658009A8 | MIFES | LOD | | | * DETECTED WHILE | 80 404670 |
| 0986 | 01 | CC 0 0 0 8 5 8 | | AND | | 1 ROFF-1 | * RUNNING RTN 1 CR | 804046 80 |
| 0988 | 01 | E5000970 | | OR | | 1 INTEX-3 | * RTN 2 | 80404690 |
| | | EDOUC863 | | אטא | | 1 5 | | 80404700 |
| 098C | | 7105 | | | | 01NE5 | | 80404710 |
| 0980 | 0 | 7611 | | MEX | | OINES | | 80404720 |
| | | | * | | | | | 80404730 |
| | | | * | | | OSWIT | PRINT OSW ERROR | 80404740 |
| | | C400C85B | CINEI | | _ | 05kIT 16 | * DETECTED WHILE | 80404750 |
| 0990 | 0 | 1800 | | RTE | | 10 | . DETECTED W. 122 | |
| | | | | | | | | |
| | | | | | | | | PRDG 10 0804-0 |
| DATE | | 28FEB66 | OIMAY | | | | | PAGE 4 |
| EC N | u. | 415120 | 41517 | (UA | | | | |

| | | | | | | | RUNNING RTN 3 CR | | 80404760 |
|--------------|-----|---|--------|------------|-----|-------------|----------------------|------|------------------------------|
| 991 (| - | 6108 | | LDX | 1 | | RTN 4 | | 80404770 |
| 992 (| 0 | 760 A | _ | MOX | | DINET | | | 80404780 |
| | | | CIVES | | L | OSWIT | SEC SVC REG ERROR | | 80404750 |
| | | C400C858 | LINEZ | RTE | • | 16 | | | 80404800 |
| 995 | | 18D0 | | LO | Ł | ALIMR C | ` | | 80404810 |
| | | C400085C | | 8 SC | ī | 01NE3.2 | BR IF IST SVC REQ TK | | 80404520 |
| | | 4C20099C 6109 | | LDX | | \$ | | | 80404830 |
| 998 (| | 7001 | | MOX | - | DINE4 | | | 80 4C48 40 |
| 3446 | U | 7001 | | | | | | | 80404850 |
| 0 99C | ^ | 6110 | CINE 3 | LCX | 1 | /0C1C | | | 80404870 |
| | | C400C863 | CINE4 | | L | INTED | | | 80404880 |
| 099F | | 1800 | CINE : | | | 16 | | MC | 80404890 |
| | | 44000A4C | | BS1 | L | PRDSW | | mc. | 80404900 |
| ,,,, | ٠. | • | | | | | D MATHATME DTN | | 80404910 |
| 0942 | 01 | 65810800 | CINE | LOX | 11 | | RET TO MAINLINE RYN | | 8C 4049 20 |
| 0944 | | CO7F | | ro | | ERRET | DO IF HE EDDED LAST | | 80404930 |
| | | 40980AC0 | | 8 S C | 11 | SORTS-1++- | BR IF NC ERROR LAST | | 8C404940 |
| | | | • | | | | RETURN TO FINISH | | 80404950 |
| 09A7 | 0 | 1810 | | SRA | | 16 | ALIGNING TAPE | | 80404960 |
| BAP 0 | 0 | 0078 | | STO | | | IN REACER | | 80404970 |
| 0949 | 0 | 7017 | | MDX | | RFAO * | ****** | | 80404990 |
| | | | | **** | *** | ****** | | | 80404990 |
| | | | * | | | CHECK | BUSY DS & | | 804050 C 0 |
| | | | * | | | C1.2 G14 | | | 80405010 |
| | | | ESYES | 1 C X | . 1 | /ccoc | | | 86405020 |
| - | | 65000000 | 63163 | LD | | OSMBY | | | 80405030 |
| 09AC | | COD4 | | AND | 1.1 | RMASK-1 | | | 80405040 |
| | | E500C977 F500097A | | ECR | | OSHR2-1 | | | 8C405050 |
| | | 4C18C988 | | 8 SC | L | X8SE++- | BR IF OSW OK | | 80405060 |
| 0.481 | UI | 46186786 | | | | | | | 80405070 |
| 0983 | 0 | Caco | | LDO | | OSMBY | PRINT DSW ERROR | | 80405080 804050 50 |
| | | E500C970 | | AND | | ROFF-1 | | | 804651CC |
| | | EDO OC97A | | OR | L.I | 1 OS MR 2-1 | | | 80405110 |
| 0958 | | 1800 | | RTE | | 16 | | MC | 80405120 |
| | | 44000A4C | | esi | L | PRDSW | | AC. | 80405130 |
| • , , , | | * | | | | | BLOCK PAUSE FOR INT | | 80405140 |
| 0988 | ن | 6100 | X8SE | LDX | | 1 0 | * ROUTINE REENTRY | | 80405150 |
| | | A0800000 | | STX | L | 1 MLSCF+1 | * KOUTTHE KEENINT | | 80405160 |
| | | | • | | | | BRANCH TO SCHEWHERE | PM01 | 80405170 |
| 09BE | 00 | 4000000 | X8 SY | x 8SC | L | /ccc | ****** | | 80405180 |
| | | | | **** | *** | ****** | | | 80405190 |
| | | | | | | | | | 804052CO |
| | | | • | | | COMB | ARE ROUTINE | | 80405210 |
| | | | * | 0.0 | | /0C00 | PRE ROOTINE | SE | 80405220 |
| 0900 | | 0000 | ROIT | DC | L | | SAVE LAST CHAR READ | | 80405230 |
| | | C400CA66 | READ | LO Sto | | | <u></u> | | 80405240 |
| | | D400CA69 | | XIO | | XICRR | READ CHARACTER | | 80405250 |
| 0905 | 0 | C880 | | XI. | | ******* | | | 80405260 |
| 000 | | C4000444 | 4 | LD | L | CARED | SAVE CHARACTER READ | | 80405270 |
| | | 1 C4000A66 | | STO | | SAVIT | | | 80405280 |
| 0968 | 9 0 | 005E | | | | | | | 8C 405 2 50 |
| 0000 | | 1 2C410A66 | • | STS | L | CAREO./41 | STG PROT READ AREA | | 804053C0 |
| 0909 | | C85C | | LOC | | K8040 | | | 80405310 |
| 0900 | | C8A9 | | X10 | | XICRR | FORCE READ ERROR | | 8C40532G 8G40533G |
| 0900 | | 0884 | | X10 | | XIOSD | SENSE DSW | | 80405340 |
| | | 1 2C40GA66 | | STS | | | CLEAR STO PROT BIT | | 80405350 |
| 0900 | | 0082 | | ŞTO |) | OSMAS | | | 80465360 |
| 090 | | EOA6 | | ÁN | | RMASK | | | 8C405370 |
| 096 | | i | | EOF | | K8C40 | 20 15 05H 07 | | 80405380 |
| | | 1 4C1809E0 | | BS | | ROITA,+- | BR IF OSW OK | | 80405350 |
| | • | | | | | | ORENT DEN ERROR | | 80405400 |
| 090 | 5 0 | CBAD | | LO | | OSHAS | PRINT DSW ERROR | | 80405410 |
| 090 | | | | AN | | ROFF | | | 80405420 |
| 09D | | | | GR | | K 8 04 0 | | | 80405430 |
| 09D | | | | RT | ŧ | 16 | | | |
| | | | | | | | | | |

28FEB68 C1MAY66 415120 415120A DATE EC NO.

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| | | | | • | | | | | | |
|--------------------------------------|--------------------------------|---|--|-----|---------------------------------|----------------------|--------------------------------|---------------------------------------|-------------|--|
| | | | | | | | | | | |
| IBM MAINTENANCE C | CLAGNUSTIC PROGRAM FOR TH | E 18CC SYSTEM | PART ND. 2196358 PAGE 5 | 1 | IBH MAINTENANCE C | IAGNOSTIC PROGRA | AM FOR TH | E 10CC SYSTEM | | PART ND. 21963 PAGE |
| 1054/55 FUNCTION | TEST | | | | 1054/55 FUNCTION | | | | | |
| | | | | | | | | | | |
| 0909 0 6117 | + LOX 1 /0017 | | 80405440 80405450 | • | 0A1E 0 6906 0A1F 01 4400C92E | STX 1 BSI L | | READER READY | | 80406120 BC406130 |
| 09DA 0 407I | BSI PROSW | | 80405460 | 1 | 0A21 0 6802 | STX (| ERRET | WESTER RESERVE | | 80406140 |
| 09DB 0 C04B | LO SAVIT | CHECK IF SAME CHAR | 80405470 80405480 | | 0A22 01 4C0C093E | BSC L | FEED | CONTROL READER | | 80406150 |
| 09DC 01 840C0A66 | CMP L CAREO | WAS READ | 80405450 | | | • | | | | 804061 <i>6</i> 0 80406170 |
| 090E 0 1000 09DF 0 701E | NDP Mox Roiti | NO - ERRDR IN READ | 804055C0 80405510 | - | 0A24 0 0000 | ERRET OC | /0000 | RET TO CMPRE IF SET | 1 | 80406180 |
| | • | NO EMBR 14 READ | 804055 20 | | 0A25 0 0000 0A26 0 0000 | CORCT OC Nist CC | /0C00 | TAPE ALIGNMENT * NORK AREAS | | 80406190 |
| U9EO O (895 | ROITA XIO XICRR | REAO | 80405530 | - , | 0A27 9 C000 | SAVIT DC | /0000 | SAVED CHARACTER | | 804062 00 80406210 |
| 09E1 01 C400CA67 | RDITC LD L XCHAR | OC CHARACTERS | 804055 40 80405 550 | 1 | 0A28 0 E040 0A29 0 FF0C | KBO4C OC | /8040 | | | 80406220 |
| 09E3 01 F40CCA66 | ECP L CARED | CCMPARE | 80405560 | - | 0A29 0 FF0C 0A2A 0 C000 | NOLNE DC etlne DC | /FF00 /0C00 | BIT LINE SHORT CK WO | | 80406230 80406240 |
| 09E5 0 1808 09E6 01 4C20CACA | SRA 8 | AD TE NOW SENDANS | 80405570 | | 0A28 0 FF00 | KFFOC OC | /FF00 | CONSTANT . | | 80406250 |
| 09E8 01 7401CA25 | BSC L ROIT2.Z MDX L CORCT.1 | BR IF NON COMPARE | 80405580 80405590 | | 0A2C 0 0064 | TRIAL OC | 10C | ALIGNMENT COUNTER | 6 | 80406260 |
| 09EA 0 705F | MOX ROITE | EXIT | 804056C0 | | 0A2D 01 C400C802 | ROIT4 LD L | SWC | | | 80406270 80406280 |
| 09EB 0 6834 | * | | 80405610 | | 0A2F 0 1008 | SLA | 8 | | | 80406290 |
| 09EC OC 6500A0C1 | STX C NIST LDX L1 /ACO1 | PRINT TAPE ALIGNED | 80405620 80405630 | | 0A30 01 4C100A35 0A32 0 100B | | RDITE | BR 1F NO REALIGN | ε | 804063C0 |
| OPEE OC 660CAFED | LDX L2 /AFED | | 80405640 | | 0A32 0 100B | SLA STO | N1ST | | | 80406310 80406320 |
| 09F0 C 407A 09F1 01 C409C802 | BSI PTLOG | 711011 DCC 05 41 1011 011 | 80405650 | | 0A34 C 70E8 | MDX | ROITS | | | 80406330 |
| 09F3 0 10U9 | LD L SWC SLA 5 | TURN DEF REALIGN SW | 80405660 80405670 | | | • | | | 8 | 80406340 |
| 09F4 0 1809 | SRA 9 | | 80405680 | * , | | • | | | | 80406350 |
| 09F5 01 C400C802 | STO L SWC | DECE 017 4 105 00000 | 80405690 | | 0A35 0 6114 | RDITE LOX 1 | /0014 | PRINT DATA READ ERR | | 804063 <i>6</i> 0 804063 <i>7</i> 0 |
| 09F7 0 1810 09F8 0 CO31 | RDITE SEA 16 STO BTLNE | RESET BIT LINE CHECK | 804057 CO 80405710 | | 0A36 0 C031 | LO | LCHAR | | | 80406380 |
| 09F9 C C031 | LO KFFOO | | 80405720 | | 0A37 0 F02F 0A38 01 4C18GA3E | ECR 8SC L | XC+AR ROIT5.+- | 80 TE 815 C (A.9 (ACD | 8 | 80406350 |
| 09FA 0 COZE | STO AOLNE | | 80405730 | | OASA O COZB | LO | CARED | BR IF BLF S/NB CNGD | | 804064 00 89406410 |
| 09F8 0 6164 09FC 0 692F | LCX 1 10C STX 1 TRIAL | | 80405740 80405750 | | 0A3B 0 F020 | EOR | LREAD | | | 8040642C |
| 0.000 0.20 | * | | 804C5750 80405760 | | 0A3C 0 4818 0A3O 0 6115 | BSC LDX 1 | ← /0C15 | BR IF RCR BUF CNGED | | 80406430 |
| 09FD 0 704C | MEX ROITE | EXIT | 80465770 | | 0A3E 0 C028 | ROITS LO | XCHAR | | | 80406440 80406450 |
| 09FE 0 1800 | * ROIT1 RTE 16 | | 804057 8 0 804057 5 0 | • | 0A3F 0 1898 | SRT | 24 | | | 30406460 |
| 09FF C CC66 | LC CAREO | | 804058C0 | | 0A40 0 1088 0A41 0 CO24 | SLT LD | 8 Cared | | | 30406470 |
| 0A00 0 6118 | LOX 1 /18 | SET MESSAGE 10 | 86405810 | | 0A42 00 6600EADA | | /DAOA | | | 80406480 804064 9 0 |
| 0A01 01 7401CA61 0A03 01 44J0CA4C | MCX L EMESG,1 BSI L PROSW | | 80405820 | | 0A44 0 6A21 | STX 2 | CARED | | | 0406500 |
| OAC5 C1 74FFCA61 | MDX L EMESG1 | | 80405830 80405840 | | 0A45 01 7401CA61 0A47 0 4004 | MDX Ł BSI | EMESG, 1 | | | 0406510 |
| 0A07 0 CO1F | LO SAVIT | | 80405850 | | 0A48 01 74FFCA61 | | PROSW Emesg,-1 | | | 30406520 30406530 |
| 0A08 C C05E 0A09 0 70D7 | STO ACHAR MDX ROITO | | 80405860 | | | • | | | | 30464540 |
| | * | | 80405870 80405880 | | 0A4A 01 4C8CC9C0 | ROITE BSC I | | ******* | | 80406550 |
| 0A0A 0 C018 | RDIT2 LD N1ST | | 80405850 | | | • | ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ | · · · · · · · · · · · · · · · · · · · | _ | 80406560 80406570 |
| 0A08 01 4C20CA2D 0A00 0 C01C | BSC L RDIT4,Z LD BTLNE | 8R IF NCT FIRST ERR BIT LINE CPEN CK | 80405900 80405910 | | | • | | | | 10406580 |
| OADE O EGS7 | CR CAREO | BIT EINE CPEN CK | 80405910 80405920 | | | • | PRIN | T ERROR ROUTINE | | 0406590 |
| OAOF 3 CO1A | STO BTLNE | | 80405930 | | 0A4C U 0000 | PROSE CC | /0C0C | PRINT ERROR RTN | | 804066C0 80406610 |
| 0A10 C C018 | * LO ADLNE | BIT I THE CHEST EN | 80405940 | | | * | | | | 0406620 |
| 0A11 0 E054 | ANO CARED | BIT LINE SHERT CK | 80405950 80405960 | | 0A40 0 D816 | STO ● | EMESG+3 | SAVE DATA WAS + S/B | 8 | 0406630 |
| OA12 0 CO16 | STC NOLNE | | 804C5970 | | 0A4E 0 6914 | | EMESG+2 | SAVE MESSAGE ID NO | | 0406640 0406650 |
| 0A13 01 74FFCA2C | MOX L TRIAL,-1 | COUNT DEWN 100 MAX | 80405980 | | OA4F O CO1A | LO | KECOO | THE METORIE IN NO | | 0406660 |
| 0A15 0 7007 | MOX ROIT3 | COCKI DEWN 100 PAX | 80405990 80406000 | | 0A50 G ER12 0A51 O CO11 | GR STO | EMESG+2 | | 8 | 0406670 |
| 0417 0 4115 | • | | 80406010 | | ONDI U EUII | STO | EMESG+2 ****** | ******* | | C4C6680 C4O66 9 0 |
| 0A16 0 6119 0A17 C CO11 | LCX 1 /19 LO NOLNE | | 80406020 | | 0A52 0C 448C0130 | EROSH BSI I | ERROR | | _ | 0406700 |
| 0A16 0 1800 | RTE 16 | | 804060 30 804060 4 0 | | 0A54 1 0A61 0A55 1 0A5A | 0C | EMESG | MESSAGE ADDR | * 80 | 0406710 |
| 0A19 G CG1G | LD BTLNE | | 80406050 | | 0A56 1 0A57 | CC DC | CKESX ERLOP | BUSY RETURN ACOR 4 LEOP ON ERR ACOR 4 | | 04067 20 04067 3 0 |
| OA1A O FO1O OA1B O 4030 | EGR KFFOO BSI PR!!SW | DDILT NO ALTON CONOC | 80406 050 | | | ********** | ******* | ******** | • | 0406740 |
| 0A1C 0 700A | MOX ROITD | PRINT NC ALIGN ERROR | 80406070 80406080 | | 0A57 01 65800A4C | ERLOP LOX 11 | | NORMAL + LOCP RETS | 80 | 0406750 |
| | • | | | 1 | 0A59 0 7002 | MOX | PDSWX | | 80 | 0406760 |

OATE EC NO. 28FEB66 415120 C1MAY60 415120A

0A1D 0 61F8

RDIT3 LDX 1 -8

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80406050 80406070 80406080 80406090

804061C0

80406110

DATE EC NO. 28FEB66 415120 01MAY66 415120A

CKDS X LOX L1 EROSW POSWX STX L1 MLSCF

BUSY RETURN TO CALL

0A5A 01 6500CA52 0A5C 01 6D00CBC9

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80406760 80406770

80406780

80406790

1054/55 FUNCTION TEST

OATE 28FE866 CIMAY66 EC NO. 415120 415120A

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IBM MAINTENANCE CLAGNOSTIC PROGRAM FOR THE 18CO SYSTEM

1054/55 FUNCTION TEST

| OASE OC | 4C80C120 | | BSC | I | START | | MX | 80406800 |
|------------------|----------------------|--------|-----------|-----|----------------|--------------------------------------|------|--------------------------------------|
| | | • | | _ | | | | 80406810 80406620 |
| 0 A60 | 0000 | | 855 | E | | COMMITTED | | 80406830 |
| 0 A60 0 | 1000 | TIMEX | | | /1000 | COUNTER WORD COUNT | | 80406840 |
| DA61 0 | 0002 | EMESC | DC | | /DC02 /000C | HEX OUTPUT | | 80406850 |
| CA62 C | 0000 | | DC | | /DC00 | MSG IO | | 80406860 |
| 0A63 0 0A64 U | 6000 6000 | | DC | | /0000 | OSWAS | | 80406870 |
| 0A64 U 0A65 O | 0000 | | DC O | | /0000 | OSW S/8 | | 80406880 |
| UAUJ | 0000 | • | | | | | | 80406890 |
| | | * | | | | | | 80406900 |
| 0A66 D | CODO | CARES | DC | | /DC0G | CHARACTER READ | | 80406910 |
| 0A67 0 | 0000 | XCHAR | DC | | /0C0C | PUNCH DUTPUT CHAR | | 8040692 0 8040693 0 |
| 0A68 C | COOC | LCHAR | | | /0C00 | PREVIOUS CUTPUT CHAR | | 80406940 |
| 0A69 0 | opoo | LREAC | | | \0C00 | PREVIOUS CHAR READ | | 80406950 |
| 0A6A 0 | E000 | KEDOC | LC. | | /E COO | ****** | | 80406960 |
| | | * | **** | *** | ****** | ••• | | 80406970 |
| | | • | | | | | | 80406980 |
| | | • | | | LOG | MESSAGE ROUTINE | | 80406990 |
| | | * | | | - | | | 80407000 |
| 0A68 C | 0000 | PTLOC | DC | | /0630 | | ME | 80467010 |
| 0 A6C 0 | 6910 | | STX | 1 | LGMS+2 | SAVE MESSAGE ID | | 80407020 |
| 0,000 | | * | | | | | | 80407030 |
| 0 00AC | 6A10 | | STX | - | LGMS+3 | SAVE MODIFIERS | | 80407040 |
| | | **** | | | | ************* | 5.0 | 80407050 804070 6 0 |
| DAGE DD | | PTLO | | I | LCG | * POAPPER OF MARK | \$C | 80407070 |
| DA70 1 | 0A78 | | CC | | LGPS | ADDR OF MESSAGE * BUSY RETURN AGOR * | | 80407080 |
| 0A71 1 | 0A75 | | DC | | PTL02 /CC00 | RUN * | | 80407090 |
| 0A72 C | 0000 | ***** | DC | *** | | **** | | 80407100 |
| 0A73 0 | COF7 | **** | LO | | PTLOG | NORMAL RETURN | | 80407110 |
| DA74 D | 70D1 | | PDX | | PTL01 | | | 80407120 |
| 0A75 C | CCD4 | PTL02 | | | LGPSI | BUSY RETURN | | 80497130 |
| | 04006809 | PTLOI | STO | L | MLSCF | | | 80 40 71 40 |
| 0A78 DC | | | 8 S C | I | START | | MX | 80407150 |
| | | • | | | | | | 80407160 |
| OATA | COCO | | BSS | E | | | | 80407170 80407180 |
| 0A7A 1 | OA6E | LGMS 1 | | | PTL06 | LODO COLNIT | | 80407150 |
| OATB O | 0001 | LGMS | CC | | 1 | MDRD COUNT | | 80407200 |
| 0A7C 0 | 0000 | | DC DC | | /0000 /000 | HESSAGE ID NUMBER | | 8D407210 |
| 0A70 C | 000C | | DC | | /0C0C | MODIFIER MESSAGE | | 80407220 |
| OA7E C | ODSC | **** | **** | *** | | ******** | : | 80407230 |
| | | * | | | | | | 80407240 |
| | | * | | | TIME | O OELAY ROUTINE | | 80407250 |
| | | * | | | | | | 8D4D7260 |
| OA7F D | CDCO | TIME | DC | | /CC00 | | SE | 80407270 80407280 |
| | 6500 1000 | | LOX | | /1C00 | SET UP COUNTER | | 80407290 |
| 0A82 G | 6900 | | STX | - | TIMEX | | | 80407300 |
| - | 74FFCA6C | | FOX | L | TIMEX,-1 | | | 804C7310 |
| DASS C | 7002 | | P O X | I | TIME | EXIT TIPE UP | SX | 80407320 |
| | 4C8DCA7F 660CDA83 | TIME | | | TIME+4 | SET FOR REENTRY | | 80407330 |
| DAGE OF | 6EOGC3UA | 11112 | STX | | ML SCF+1 | | | 80407340 |
| | 4C90C120 | | PSC | t | START | `` | | 80407350 |
| | | ***** | **** | *** | ******* | ********* | k | 80407360 |
| | | * | | | | | | 80407370 |
| | | • | | | BUIL | LC NEXT CHARACTER | | 80407380 80407390 |
| | | * | | | | ROUTINE | | 8D4074 00 |
| | | * | | | 101.00 | | SE | 80407410 |
| O ARE O | 0000 | MARK | C C | | /OCOO XCHAR | SAVE LAST CHARACTER | O.L. | 80407420 |
| OASF C | C007 | | LO SRA | | 8 | onte en et en en en en en | | 80407-30 |
| 0A90 0 | 1808 | | SLA | | 8 | | | 80467440 |
| 0A91 C 0A92 O | 1008 0005 | | STO | | LCHAR | | | 80407450 |
| UMTE U | 2002 | • | | | | | | 80407460 |
| 0A93 0 | 65000001 | | LDX | LI | 1 | INIT TEST XRI | | 80407470 |
| | | | | | | | | |

| 0495 00 | 6600C00C | CULP | LDX | L2 | 0 | XR2 | | 80407480 | |
|------------------|-------------------|--------------|-------|-----|----------------|--|----|----------------------|--------|
| | 4E800A8F | | 8 S C | 12 | WHAT | GO BUILD CHARACTER | | 80407490 | |
| • | | * | | | | | | 80407500 | |
| 0A99 01 | C500CAC3 | KRIPX | LD | Ll | 8ITSX | START NEW RIPPLE | | 80407510 | |
| 0A98 0 | DOCB | | STO | | XCHAR | * PATTERN | | 80407520 | |
| OA9C O | 6201 | | LOX | 2 | 1 | | | 80407530 | |
| 0A9D 0 | 701C | | MEX | | EXITX | | | 80407540 | |
| • | | * | | | | | | 80407550 80407560 | |
| 0A9E 0 | COC8 | SRIPX | LO | | XCHAR | SHIFT RIPPLE PATTERN | | 80407570 | |
| 0A9F 0 | 1001 | | SLA | | 1 | | | 80407580 | |
| OAAO O | 0006 | | STO | | XCHAR | | | 80407590 | |
| OAA1 0 | 4820 | | 8 S C | | Z | SKIP NEXT CH NO BITS | | 804076C0 | |
| OAA2 D | 7D18 | | MDX | | EXITX | | | 80407610 | |
| OAA3 O | 6202 | | FOX | 2 | 2 | DIACE ALL BIT CHAP | | 80407620 | |
| OAA4 O | COIE | | ro | | BITSX | PLACE ALL BIT CHAR | | 80407630 | |
| OAA5 O | COCI | | STO | _ | XCHAR | | | 80407640 | |
| OAA6 O | 6925 | | STX | 1 | COUNX | | | 80407650 | |
| | | * | | | | SKIP WHEN COUNT GO O | | 80407660 | |
| OAA7 C1 | 74FFCACC | PARX | MOX | L | COUNX,-1 | SKIP WHEN CEUNA GO O | | 80407670 | |
| DAA9 C | 7011 | | MDX | _ | EXITX | | | 80407680 | |
| OAAA O | 6200 | | LOX | | 0 | | | 80407650 | |
| O BAAO | 7101 | | MDX | | 1 | | | 804077CO | |
| OAAC O | 6920 | | STX | | KGUNX | SKIP EXCEPT ENO RIPPE | | 80407710 | |
| | 74F80AC0 | | MOX | L | KOUNX,-8 | BR TO END RIPPLE ROUT | | 80407720 | |
| OAAF O | 70D 1 | | MOX | | ENR1X | BR TO EXIT | | 8D407730 | |
| 0 08A0 | 700 A | | MDX | | EXITX | BR TO EATT | | 80407740 | |
| | | * | | _ | | END RIPPLE PATTERN | | 80407750 | |
| 0A81 0 | 6203 | ENRIX | | 2 | 3 | END RIFIEL TATTERN | | 80407760 | |
| 0 A 8 2 C | 7008 | | MOX | | EXITX | | | 80407770 | |
| | | * | | | COLINIX | ALL CHARS PATTERN | | 80407780 | |
| 0A83 D | C018 | ALLEX | | | COUNX | ALE CHARD THITEM | | 80407790 | |
| 0 A84 0 | 00B2 | | STO | | XCHAR ONEEX | ADD DNE I. E. 0100 | | 804078C0 | |
| 0A85 C | 800 E | | A | | COUNX | ADO ONE 10 E0 0110 | | 804C7810 | |
| OAB6 O | 0015 | | 510 | | EXITX, Z | | | 80407820 | |
| 0887 01 | 4C20CA88 | | 85C | L | EVIIVA | | | 80407830 | |
| | | * | | | | | | 804C7840 | |
| | | * | | , | 1 1 | REINITIALIZE | | 80407850 | |
| OAB9 O | 6101 | | LDX | | 2 0 | NE III VIII VIII VIII VIII VIII VIII VII | | 80407860 | |
| DASA D | 6200 | EX 1T) | LOX | | DULP-1 | | | 80407870 | |
| 0 88A 0 | 6908 | EXIII | STX | | DULP+1 | | | 8C407880 | |
| OA8C D | 6A09 | | 85C | ľ | MARK | EXIT | SX | 80407890 | |
| OASD DI | 4C80CA8E | • | 630 | • | FARR | | | 804C79C0 | |
| | | • | | | | | | 80407910 | |
| 0405 3 | 0400 | MHAT | CC | | NRIPX | RECORD CONTROL AORS | | 80407920 | |
| OABF 1 | 0A99 0A9E | W11-7-1 | οc | | SRIPX | · - | | 80407930 | |
| 0AC0 1 0AC1 1 | OAA7 | | DC | | BARX | | | 80407940 | |
| OACI I | 0A83 | | oc | | ALLBX | | | 804D7950 | |
| UAL Z I | UNUS | • | • | | | | | 80407960 | |
| | | | | | | | | 80407970 | |
| 0AC3 0 | FFD0 | EITS | x oc | | /FFOC | CHARACTER PATTERN | | 80407980 | |
| OAC4 O | 0100 | CNEE | | | /0100 | * CENSTANTS | | 80407990 | |
| 0AC5 0 | 0000 | CILL. | OC. | | /CCC0 | | | 80408000 | |
| OAC6 C | 00E0 | | CC | | /00E0 | | | 80408010 | |
| OACT O | 00F0 | | DC | | /CCFO | | | 80408620 | |
| 0AC8 0 | COF8 | | OC | | /00F8 | | | 80408030 | |
| 0AC9 0 | OOFC | | DC | | /OCFC | | | 80408040 | |
| OACA O | OOFE | | OC | | /OCFE | | | 804 0 8050 | |
| OACS O | 00FF | | DC | | /OCFF | | | 80408060 | |
| 0,000 | | * | | | | | | 80408070 | |
| O ACC G | 0000 | COUN | X EC | | /CC00 | MORK AREAS | | 80408080 | |
| OACO D | 0000 | KOUN | | | /0C00 | | | 80408090 | |
| J D | | | **** | *** | ******* | ******** | | 804081CO | |
| | | • | | | | | | 80408110 | |
| | | • | | | | | | 80408120 | |
| | | • | | | A CO | RESSES FOR RETURN TO | | 80408130 | |
| | | • | | | | MAINLINE AFTER INTRPT | | 80408140 | |
| OACE 1 | 98C2 | SORT | S DC | | RTNIA | ROUTINE 1 | | 80408150 | |
| | | | | | | | | PROG ID | 0804-0 |
| OATE EC NO. | 28FE866 415120 | C1MA 4151 | | | | | | PAGE | 64 |
| | | | | | | | | | |

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1054/55 FUNCTION TEST

| OACF | | 0808 | | 00 | | RTN2A | ROUTINE 2 | | 80408160 |
|--------|-----|----------|--------|------------|------|-----------|----------------------|----|-------------|
| 0 A 00 | 1 | C8D2 | | DC | | RTN3A | ROUTINE 3 | | 80 40 81 70 |
| OADI | 1 | C8E7 | | DC | | RTN4A | ROUTINE 4 | | 80408180 |
| 0A02 | 1 | 0901 | | DC | | RTN5A | ROLTINE 5 | | 80408150 |
| | | | | | | | | | 80408200 |
| | | | * | | | | | | 80408210 |
| 0A03 | 01 | 65000879 | NOPF | LCX | LI | 8055 | TRY AGAIN - LATER | | 80408220 |
| 0405 | 01 | 6000C809 | | STX | LI | ML SCF | | | 80408230 |
| CAD7 | 00 | 40860120 | | 8 S C | 1 | START | | | 80408240 |
| | | | * | | | | | | 80408250 |
| | | | * | | | | | | 80408260 |
| OAD9 | 0 | 0000 | TENO | 00 | | /0000 | | | 80408270 |
| OADA | GC | 6500030E | | LDX | Ll | 782 | SET RIN1 FOR THE REC | | 80408280 |
| OADC | 01 | 60000888 | | STX | L1 | RTN1I+1 | _ | | 80408250 |
| OADE | 0.0 | 67007FFF | | LOX | L3 | /7FFF | | | 804083C0 |
| OAEO | 61 | C4090866 | TENDI | LD | L | INTEX | | | 80408310 |
| OAE2 | C 1 | 4C18CAE6 | | 8 S C | L | TEN02.+- | BR IF INTRPT NOT EXP | | 80408320 |
| OAE4 | 0 | 73FF | | MDX | 3 | -1 | | | 80408330 |
| OAE5 | Ç | 70FA | | MOX | | TEN01 | | | 80408340 |
| OAE6 | 01 | 2C40CA66 | TEND 2 | STS | L | CARED,/40 | | | 8D408350 |
| | | | **** | **** | *** | ******** | ************** | | 80408360 |
| OAE8 | 00 | 44800132 | | BS1 | 1 | RELOV | RELEASE DEVICE # | | 80408370 |
| DAEA | 1 | 0812 | | DC | | 00EF | • | | 80408380 |
| OAE8 | 1 | 0808 | | 30 | | TERM | | | 80408350 |
| | | | **** | **** | *** | ******** | ******** | | 804084C0 |
| OAEC | 01 | 4C80CA09 | | 8SC | 1 | TENO | | | 80408410 |
| | | | * | | _ | | | | 80 4C 84 20 |
| | | | • | | | | | | 80408430 |
| OAEE | 01 | 6D00GA25 | PTENC | STX | L1 | CORCT | | | 80408440 |
| | | | **** | **** | **** | ******* | ******** | | 80408450 |
| OAFO | 00 | 4C80C12E | | 8 S C | 1 | ENO | ENO PROGRAM + | SC | 80408460 |
| | | | **** | | **** | | ************* | | 80408470 |
| OAF 2 | | 0000 | | 855 | E | | | | 80408480 |
| OAF 2 | | | | CRG | _ | PIC+/2FE | | | 80408490 |
| OAFO | 0 | 0000 | PENO | CC | | | | | 80408500 |
| OAFE | | 0869 | | END | | PTEGN | | | 80408510 |
| | | | | | | | | | _0.00740 |

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 18CC SYSIEM

REFERENCES

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1054/55 FUNCTION TEST

```
CROSS REFERENCE LISTING
```

SYMBOL VALUE

```
ALL8X 0A83
                    OVCS
                    OACI
8 AR X
         OAA7
BEGIN
         0120
                    GCC0,0669
BITSX
         OAC3
                    CA59.0AA4
8088
         0879
                    C874.0A03
80$$2
         087F
8SYES
        C9AA
                    0850,0541,0954,0964,6984
                    C9F8,0A00,0A0F,0A15
C87A,0E8C
BTLNE
         CAZA
8UILO
        0886
                   C845,0596
C8E5,0576,C9C1,05C6,09C9,C5CE,090C,05E3,09FF,0A0E,
CA11,CA3A,CA41,OA44,OAE6
BUMRÇ
        0850
CAREO
        CA66
CKOSX 0A5A
                    CA55
                    0870,09E8,0A1E,0AEE
CORCT
         0A25
COUNX
         OACC
                    0AA6,CAA7,0A83,0A86
                    08C2,0ECA,C8D4,051C
CRASH
        0916
ODEF
         0812
                    C879, CE82, OAEA
DINEI
         098E
                    C83C
DINE2
         0993
                    C844
DINE3
         0990
                    C958
DINE4
DINE5
         099D
                    C952.0598
         C99F
                    C54C,0560,096F,058D
DINE6
         09A2
                    C84E
DINT
         0831
                    C860
ITMIO
         0834
                    C84C, C54D, 094F
DINT2
        083F
                    C84A
DINT4
                    0827
         C847
                    C920,0526,C93C,0536,C9D0,C5D5
C945,0549,C955,055D,C968,056C,C9AC,09B3
DSWAS
         0983
OSW8Y
         0981
10W20
                    0834,0E39
         0861
                    C836.0E3F
        0862
DSWIT
                    0823,C64C,C986,C98E,C953
         C85B
DSWRX
        C97C
                    095F
DSWR2
         0978
                    C948,05AF,C986
OSWX2
         C97C
                    09 EE
                   0844,0EA7,CAB8,0A8C
OUL P
         0A95
OVA
                    8830,6880
         CBIE
EMESG
        UA61
                    OBF3, CEF7, OAO1, OAO5, CA45, CA48, OA40, OA4E, OA50, OA51,
                    GA 54
ENO
ENRIX
        012E
                    COCO.OAFO
        0A81
                    CAAF
EPA
        C808
ERDSW
         0452
ERLOP
         JA57
ERRET
                    C9A4,05A8,0A21
                   CGCO, 0A52
CA50, 0AA2, CAAS, 0A8C, 0AB2, 0A87
ERROR
        C130
EXITX
        CA88
FEEO
                    C8C7,08FA,CA22
        093E
HALT
        0133
                   0826
0831,0835,8841,099D
HANOL
        C85E
INTED
        0863
INTEX
        0866
                    C824, C628, C82A, C656, C93F, O552, C962, O58A, OAEO
KE000
        0A6A
                    OA4F
KFF00
        0A28
                    C9F9,CA1A
KOUNX
        OACD
                    CAAC, DAAD
K8C40
                    09C8,09D2,09D7
LCHAR
        0A68
                    0A26,0A92
                   CAEC.OAED.OATO
DATS
OCCO.OAEE
OSC3.OA3B
LGMS
        0A78
LGMS1
        CA7A
LOG
        012F
LREAD
        CA69
        0A8E
MARK
                   C880,0EC4,08CC.0A80
MGR 1
        C890
                    C6D9,0EE1,C8FD,6911,091A
MLSCF
        0839
                    C852,CE76,C98C,OA5C,CA76,CA8A,DAD5
NIPES
        0984
```

```
1054/55 FUNCTION TEST
                   C9FA,CAIC,CA12,OA17
NOLNE 0A29
        CA33
                   C8E1
NDPE
        CA99
NRIPX
                  0872,C8A2,C9E8,OACA,OA33
        0A26
NIST
        0915
DNEEX
        OAC4
                  0A85
PDSWX
        CASC
        OAFC
                   2389
PEND
                   C668,C890,C892,0897,C8A0,CAF2
        C7FF
PID
                  0830,083E,0846
C82C,083A,0842
PINT1
        0850
        084E
ETRIG
        097F
                   C927.C96D
PDFF
PDINT
        C81F
                   CEF5.C925.C935.09AC.C989.05DA.0A03.0A18.0A47.DA57
PRDSW
        CA4C
PT8GN
        0869
                  CAFE
                   CE 64 . C885
PTEND
                  CEO£, C8C7, C877
PTILZ
        086C
PTLCG
        CAGE
                   CSFG,CA73
        0A76
                   GA74
PTLO1
        0A75
                   CA71
PTL 02
                   OA 7A
        GAGE
PTLOE
                   0800,0914
        0961
PUNH
                   CBAO
        0801
RAD
        0910
                   0519
RASH
                   CECE, CBD2, CA4A
        0900
RDIT
RDITA
        C9EC
                   C9£3
                   CAIC
RDITD
        09F7
                  CSEA.09FO
RDITE
        OA4A
                   CAC9
RDITC
        09E1
RDIT1
        C9FE
                   C9DF
                   CSE6
RDIT2
                   CA 15,0A34
        CALO
RDITS
                   CACB
        CAZD
RD1T4
                   CA 28
RDIT5
        CABE
                   CABO
        0435
RDIT6
                   C9 #9
READ
        0901
                   CCCO.OAE8
        0132
REL DV
                   CCCC.CB7F
        C 131
REQDV
                   C8EE,C897,C85E,C85C,C9A2
C867,C931,C9AD,C5D1
RID
        C80C
RMASK
        C978
                   (937,6944,6988,0984,69D6
0866,680F,68E4,68F9,6932,693D,6A1F
ROFF
        097E
        092E
RRDY
        OBAF
                   C85E.CEAD
RTCON
                   08C3
RTN1
        0802
                   OACE
RTNIA
                   CBAF, CBBC, CADC
RTN11
        C 987
                   8 28 2 C 8C 8
        C8C4
KTN2
                   CACF
        8383
RTN2A
        CBCC
                   C821,0805
RTN3
                   CACO
        0802
AENTS
                   C8F0
        08DE
RTN4
                   CACI
        08E7
RTN4A
                   C882
RTN41
        C8D7
                   0908,0900,CAD2
RTN5A
        0901
RTN58
        0903
                   0900
                   C9C8
RTN5D
        09CD
                   0883
RTN51
        C8F8
                   09C8,09D8,CA07
        0 A 2 7
SAVIT
SINT
         0828
                   085E,085F
                   09A5
SORTS
        CACE
SRIPX
        CASE
                   UJCO,CASE,CA78,OA8C,CAD7
        0120
START
                   C853,08EC,C910
SHCMP
        0386
                   C860, C9F1, C9F5, 0A20
         0802
SWU
                   C852,0807,C8DE,CEr8,C9CE
SWI
         0803
 SW2
         C804
 SW3
         0805
                   08C8.0AEC
 TEND
         OAD9
```

IBM MAINTENANCE DIAGAGSTIC PROGRAM FOR THE 18CC SYSTEM

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ISM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 18CC SYSTEM
1054/55 FUNCTION TEST
TEND1 CAEO
TEND2
                  OAE2
        CAE6
TERM
        8080
                  0928,C538,C946,055A,0969,GA86,DA88
        OA7F
TIME
                  0A 82 . 0A83
        0460
TIMEX
        88A0
                  CA85
TIMEL
                  COFC, OA13
        CA2C
TRIAL
                  CAST
        98AO
TAHM
                  08AB, CEBS, C917
WRECK
        C8D6
                  09B1
X8SE
        0988
                  0853
XYSEX
        098E
                  08CC.0EE8.C9C6.057C.C9E1.CAC8.0A37.0A3E.0A8F.DA9B.
XCHAR
                  OASE.OAAC.CAAS.OA84
                  CBCC.CEES
XFEED
XIDED
        0974
                  C943,0557
                  C8E7.C5C5.09CC.DSEC
XIDRR
        0976
                  0821.CEEE.C91F.052F.C944.C553.C967.D9CD
        0972
XIDSD
                  0886, CE89, 0956, 0966
        0970
XIDXX
                  C820,C640,C85D
        0857
XIT
                  088F,0 ECE, C8E3,0513,0922,052D
       091E
XKRDY
                  0868,0521
        0979
XMASK
```

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| 2• | PREKEQ | QUISITES | |
| | 2.1 | PROGRAM PREREQUISITES | |
| | | EQUIPMENT PREREQUISITES | |
| 3. | 3.1 3.2 3.3.1 3.3.2 3.3.3 | RUCEUURE | |
| | 3.5 3.6 | EXECUTING PROGRAM DESELECTING PROGRAM PROGRAM TERMINATION | |
| +• | 4.1 | OUTS | |
| 5. | COMMEN | NTS | |
| | 5.4 | RUUTINE I ROUTINE 2 ROUTINE 3 ROUTINE 4 ROUTINE 5 HOUTINE END | |
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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM

IBM MAINTENANCE DIAGNUSTIC PROGRAM FOR THE 1800 SYSTEM PART NO. 2196364 PAGE 1627 FUNCTION TEST 1. PURPOSE THE PURPOSE OF THE 1627 PLOTTER DIAGNOSTIC TEST IS TO EXECUTE THE DIFFERENT MOVEMENTS OF THE PLOTTER AND TO CHECK THE CABLES FOR CORRECT ADJUSTMENT. 2. PRERCOUISITES 2.1 PROGRAM PREREQUISITES THIS PROGRAM MUST RUN UNDER CONTROL OF THE DIAGNOSTIC MONITOR. THE DIAGNOSTIC MONITOR PROGRAM USES 2,047 STORAGE WORDS, AND THIS PROGRAM USES 1024 STORAGE WORDS. LQUIPMENT PREREQUISITES FOIT 6.1 THE FOLLOWING EQUIPMENT IS REQUIRED. A. 1801 OR 1802 DATA ACQUISITION SYSTEM. 8. 1627 PLUTTER MODEL 1 OR 2 . USE PROCEDURE PROGRAM LOADING STANDARD LOADING PROCEDURE AS DESCRIBED IN THE DIAGNOSTIC MONITOR USE PROCEDURE. PROGRAM OPERATION STANDARD MONITOR OPERATING PROCEDURES APPLY. THESE PROCEDURES ARE SUMMARTZED HERE. SEE DM USE PRUCEDURE FOR DETAILS. 1. CLEAR STORAGE 2. LOAD DIAGNOSTIC MONITOR 3. SELECT MODE OF EXECUTION 4. SELECT MONITOR CONTROL OPTIONS 5. SELECT PROGRAM DPTIONS FROM, TABLE O PROGRAM CONTROL FUNCTION TABLE I ROUTINE SELECT FUNCTION TABLE 2 MANUAL FUNCTION CONTROL 6. INSTRUCT MONITOR TO EXECUTE TABLE 0 CONTROL FUNCTION ************ SET FUNCTION ON IN SENSE/PROGRAM SWITCHES O AND 1. . SENSE/PROGRAM . 2. SET PID IN SENSE/PROGRAM SWITCHES 2 MIROUGH 7. . O 1 2 3 4 5 6 7 . 3. SET DESIRED CONTROL OPTIONS IN DATA ENTRY SWITCHES 0-15. . 4. PRESS CONSOLE INTERRUPT. UATA ENTRY SWITCHES * DESCRIPTION • 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 • 1..... BYPASS PRINTUUT

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EDIT PROCEDURE

FIGURES

6.2

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1

PAGE

DATE 28FEB66 EC NO. 415120 PRUG IO 0805-0 PACE 1A 1627 FUNCTION TEST

TABLE 1 ROUTINE SELECTION

```
1. SEI FUNCTION 01 IN SENSE/PROGRAM SWITCHES 0 AND 1.

SENSE/PROGRAM 2. SET PID IN SENSE/PROGRAM SWITCHES 2 THROUGH 7.

0 1 2 3 4 5 6 7 3 3. SE3 DESIRED ROUTINE NUMBER IN OATA ENTRY SWITCHES D-15.

4. PRESS CONSOLE INTERRUPT.

DATA ENTRY SWITCHES DESCRIPTION

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 **

0 0 1 ROUTINE 1- PEN UP-DOWN OCTAGON TEST

0 1 0 ROUTINE 2- REGISTRATION TEST

1 0 0 ROUTINE 3- SWING TEST

1 0 0 ROUTINE 4- STRESS TEST IWINDMILL)

1 C 1 ROUTINE 5- MANUAL CONTROL
```

TABLE 2 MANUAL FUNCTION CONTROL

| SENSE/PROGRAM SWITCHES 0 AND 1. SET FUNCTION IO IN SENSE/PROGRAM SWITCHES 0 AND 1. SET FUNCTION IO IN SENSE/PROGRAM SWITCHES 2 THROUGH 7. SET DIRECTION CONTROL IN DATA ENTRY SWITCHES 8 THRU 13. SET DIRECTION CONTROL IN DATA ENTRY SWITCHES 8 THRU 13. PRESS CONSOLE INTERRUPT. |
|--|
| ex |
| DATA ENTRY SWITCHES • DESCRIPTION • D 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 • |
| NOT USED |
| NOT USED |
| 1 PEN UP |
| |
| PEN RIGHT |
| PAPER UP |
| . 1 |
| PEN DOWN |
| SELECT SECOND 1627 |
| 111111111111111111111111111111111111111 |

3.3 PROGRAM MALTS

THIS PROGRAM HAS MO WAITE.

3.4 PROGRAM TERMINATION

STANDARD MONITOR TERMINATION

4. PRINTOUTS

ALL MESSAGES ARE GENERATED BY THE MONITOR PRINT ROUTINE AND ARE IN STANDARD MONITOR FORMAT.

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3

18M MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM

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1627 FUNCTION TEST

.1 COMMAND MESSAGES

0500 COOL OOOR AAAA A 19E THE PLOTTER IS NOT REAUY. THIS INDICATES THAT THERE IS NO POWER.

4.2 ERROR MESSAGES

OSDO ECOL ODOR AAAA ICED
THIS INDICATES A FAILURE TO RECEIVE AN INTERRUPT AFTER AN XID
COMMANO WAS GIVEN.

0500 E002 OOOR AAAA AOOO
THE PLOTTER WAS BUSY WHEN THE DSW WAS SENSED. THIS WOULD INDICATE
THAT AN XIU COMMAND WAS IN PROCESS OR THE DSW BUSY BIT CANNOT
BE TURNED OFF.

5. COMMENTS

5.1 ROUTINE 1 I PEN UP-PEN DOWN OCTAGON TEST 1

THE PURPOSE OF THIS ROUTINE IS TO TEST THE CAPABILITY OF THE PLOTTER TO EXECUTE THE PEN UP AND PEN DOWN PLOTTER COMMANDS. IN THIS ROUTINE, AS IN THE OTHER PLOTTER PATTERN GENERATING ROUTINES. AN AGORESS TABLE IS USED TO SELECT THE CORRECT PLOTTER COMPANDS. THE ADDRESS TABLE. IN TURN. POINTS TO A PAIR OF COMPUTER WORDS. USE WORD CONTAINS A NUMBER WHICH INDICATES THE NUMBER OF TIMES THE OTHER WORD I THE PLOTTER COMMAND) IS TO BE EXECUTED.

THE PATTERN PLUTTED IN THIS FUNCTION TEST CONTAINS TWO ADJACENT OCTAGONS, HHOSE SIDES ARE ONE AND ONE HALF INCHES IN LENGTH. OCTAGON NO. 1 (LEFTMOST OCTAGON) IS PLUTTED IN A CLOCKWISE DIRECTION. OCTAGON NO. 2 I RIGHTMOST UCTAGON) IS PLUTTED IN A COUNTER CLOCKWISE DIRECTION.

THIS ROUTINE IS DESIGNED SO THAT. IF A PEN UP COMMAND IS NOT EXECUTED AS IT SHOULD BE. A LINE WILL BE DRAWN IN THE INNER PORTION OF THE OCTAGON. IF A PEN OUWN COMMAND IS NOT EXECUTED. A SIDE OF THE OCTAGON WILL BE MISSING. FIGURE 1 SHOWS AN EXAMPLE OF THE OUTPUT OF THIS ROUTINE.

5.2 ROUTINE 2 REGISTRATION TEST

THE FUNCTION OF THIS ROUTINE IS TO DETERMINE IF ANY AUJUSTMENTS ARE NEEDED IN THE PEN OR ORUM MOVEMENT MECHANISMS. FIGURE 2 SHOWS THE PATTERN GENERATED BY THIS ROUTINE. IF ANY OF THE LINES FAIL TO INTERSECT. SOME MECHANICAL AUJUSTMENT OF THE PLOTTER MAY BE NEEUED.

5.3 ROUTINE 3 SWING TEST

THE PURPOSE OF THIS ROUTINE IS TO TEST THE ABILITY OF THE PLOTTER TO PLOT LONG LINE SEGMENTS IN VARIOUS DIRECTIONS. THE PATTERN GENERATED BY THIS ROUTINE IS SO DESIGNED. THAT IF PLOTTER COMMANDS ARE NOT EXECUTED OR EXTRA COMMANDS ARE EXECUTED. THE CORNERS OF THE PATTERN WILL NOT JOIN. THIS TEST WILL ALSO SHOW UP ANY MALADJUSTMENT IN THE PEN OR DRUM MECHANISM.

THE METHOD USED IN GENERATING THE PATTERN IS AS FOLLOWS.

- A. THE LEFT AND TOP SIDES OF A SERIES OF SQUARES ARE DRAWN AS A CONTINUOUS LINE. VARYING IN 51ZE FROM 10 TO 2 INCHES.
- B. THE RIGHT AND BOTTOM SIDES OF THE SERIES OF SQUARES ARE DRAWN IN ONE QUARTER INCH LINE SEGMENTS. JOINED TOGETHER, AND TOTALING THE LENGTH OF THE LEFT AND TOP SIDES.

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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM

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1627 FUNCTION TEST

C. ON COMPLETING THE PLOTTING OF THE SQUARES, LINES ARE DRAWN I BOTH SEGMENTED AND CONTINEOUS) THRU THE CORNERS OF THE SQUARES. ALL OF THESE DIAGONAL LINES SHOULD INTERSECT THE CORNERS OF THE SQUARES PERFECTLY.

FIGURE 3 SHOWS THE PLOTTER PATTERN GENERATED BY THIS ROUTINE.

ROUTINE 4 STRESS TEST (WINDMILL PATTERN)

THE PURPOSE OF THIS ROUTINE IS IO EXERCISE ALL OF THE MECHANICAL FUNCTIONS OF THE PLOTTER. THIS OBJECTIVE IS ACCOMPLISHED BY PLOTTING A PATTERN OF TRIANGLES, ROUGHLY RESEMBELING A WINOMILL. EACH SIDE OF THE TRIANGLE CONSISTS OF A SERIES OF SHORT SAWTOOTH-LIKE SEGMENTS, WHICH TESTS THE ABILITY OF THE PLOTTER TU PLOT SHORT LINE SEGMENTS WITH ABRUPT CHANGES IN DIRECTION. A SET OF FIVE TRIANGLES IS PLOTTED, THE AXIS IS HEN ROTATED 90 OFFREES AND FIVE MORE TRIANGLES ARE PLOTTED IN THE SAME MANNER UNTIL, FINALLY, FOUR SEIS OF TRIANGLES HAVE BEEN PLOTTED. WHEN THE TRIANGLES HAVE BEEN PLOTTED, A LINE IS DRAWN THRU THE INNERMOST POINTS OF THE TRIANGLES. THE RE-SULTANT PATTERN THEN APPEARS AS A WINDMILL WITH A DIAMONO SHAPED PATIERN CONNECTING THE INNER PUINTS OF THE TRIANGLES. THE DIAMOND DESIGN SHOULD INTERSECT ALL OF THE INNER POINTS OF THE TRIANGLES IF THE PLUTTER IS ADJUSTED CORRECTLY. FIGURE 4 SHOWS THE PLOTTER PAT-TERN GENERALED BY THE ROUTINE.

ROUTINE 5 (MANUALLY SELECTED PLOTTER COMMANOS I

TU USE ROUTINE 5 IT MUST BE SELECTED IN FUNCTION OI. THE PURPOSE OF THIS ROUTING IS TO PROVIDE TO THE FIELD ENGINEER THE CAPABILITY OF EXECUTING ANY PLOTTER COMMAND HE WISHES TO ON THE PLOT-TER. BY MEANS OF ENTERING THE PLUTTER COMMAND IN THE CONSULE BIT SWITCHES. THE PLOTTER WILL CONTINUE TO EXECUTE THE COMMANO UNTIL IT RECEIVES ANOTHER CUMMAND FROM THE OPERATORS CONSULE. OR A COMMAND OF ALL ZEROS IS RECEIVED WHICH WILL END THIS ROUTINE. THE ROUTINE MAY ALSO BE OFSELECTED BY SELECTING ANOTHER ROUTINE. FOR COMMAND SETTING RIFER TO TABLE 2 SECTION 3.3.3.

ROUTINE & END ROUTINE

DATE

THIS ROUTINE MAY BE SELECTED TO TERMINATE. THE PROGRAM AND WILL RETURN CONTROL TO THE DIAGNOSTIC MONITOR END ROUTINE.

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1627

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 1627 FUNCTION TEST

APPERDIX THE FOLLOWING EDIT PROCEDURE IS FOR CARD INPUT. THE EDIT PROCEDURE FOR PAPER TAPE INPUT IS LOCATED IN THE PAPER TAPE EDIT UTILITY PROGRAM DOCUMENTATION. THE PROPER EDIT CARDS 6.1 EDIT PROCEDURE MUST BE THE LAST CARDS IN THIS PROGRAM DECK. THE FOLLOWING FORMS ARE PROVIDED TO AID IN MANUALLY PREPARING THESE EDIT CARDS OR UPDATING EXISTING EDIT CARDS. IF IT IS NECESSARY TO PREPARE OR MODIFY EDIT CARDS, FILL IN THE NECESSARY DATA IN THE FORMS PRIOR TO PUNCHING THE CARDS. CARD COLUMNS THAT ARE SHADED SHOULD BE LEFT BLANK. DDEF STANDS FOR DEVICE DEFINITION EDIT FIELD. IT INCLUDES: 1. THE INTERRUPT LEVEL ASSOCIATED WITH THIS DEVICE (USE HEX NOTATION, 00-17). 2. THE ILSW BIT POSITION ASSOCIATED WITH THIS DEVICE (USE HEX NOTATION, O-F). 3. THE CHANNEL ASSIGNED TO THIS DEVICE (0-8). IF THIS IS A DPC DEVICE, PUNCH AN "F" IN THE CARD COLUMN. THE LAST EDIT CARD IS THE "END EDIT CARD". THE INFORMATION IN THIS CARD INCLUDES: 1. ANTE" IN COLUMN 1. 2. THE PID FOR THIS PROCRAM (COL. 2-3).
3. A TERMINATOR WORD OF "FFFF" (COL. 7-10). 1627-2 1627-1 DDEF DD EF FITRY 1 FUTRY 2

| | | | | | | | | ENT | RY 1 | -1 1 | ENTI | RY Z | | | | _ | | | | | | | | | | ٦ ٢ | | | 7 1 | | | ٦. | | | | | | | | | • | 1 1 | | |
|------------|--------------|-------|----------|-------------------------|-----------|---------------|--------|-----------------|----------------|-------|-----------------------|------|----------|----|---|----|----|---|-------------|----------|----------|----------|---------------|---|-------------|----------|---|-----|------------|----------------|---|-----|-----|----|-----|---------------|----|--------------|------|-----|-------------|----------|-----|---|
| | PROGRAM 1.D. | | | CARD SEQUENCE HUMBER | ER OF | `Z: 4 | X . | INTERRUPT LEVEL | ILSV BIT (HEX) | 9 I | INTERRUPT LEVEL (HEX) | | CHAMMEL | | | | | | | | | | | | YY | | | ·•• | | | | 56 | | | | 61 | | | 66 | | 1 | 71 | | |
| CC1111 1 | 1213 | 415 6 | 718 | 910 | 11 12 | 113 14 | 115 18 | 3 17 11 | 3119 | 20 21 | | | 26 | | | 3 | | | | 36 | <u> </u> | <u> </u> | <u>4U_</u> | | | 16 | _ | ++ | _51 | ╩╪ | 44 | =(< | ~== | == | | ₹'= | ++ | === | | = = | == | | === | 一 |
| = | -(음)쉬 | | | ==== | 1 | \ - \= | きき | | <u>הר</u> | = \ | | Ī | <u> </u> | | $\neg \neg$ | | 7 | | | 37 | | 1 1 | \mathcal{L} | 1 | 1 | 17 | | 1 1 | | 1 6 | 11 | 1 | 1 6 | l | | \mathcal{E} | | 1 | 17 | | | | | |
| CARD O E | 05 | 0 0 | BED | 00 | 0 | 0 0 | | >0 - | 151 | F 🔀 | | | 21 | Ш | لــــــــــــــــــــــــــــــــــــــ | 4_ | 7_ | | | 77 | | 1_1 | 27 | | | 77 | | | | 1_1 | | | | | | <u> </u> | | _ | 1 21 | | | 7 | | |
| | | | <u> </u> | | | | | | 1-1 | 10 | | 1 | 7 | 11 | | K | 9 | П | Ti | স- | TT | T | ST. | | | D | | T | | 1 | | | 1 8 | 1 | 1 6 | 3 | 11 | Į | | | | | | |
| END E | 0 5 | c c 3 | 3 F 1 | FF | | | | 7 | | | | | <u> </u> | | | 4 | 3_ | | | 77 | | 1 | 2 | | | 72 | | | | 1_1 | لــــــــــــــــــــــــــــــــــــــ | | 3_1 | | 1 1 | 77 | | | 122 | | | 7 | | |
| | -/ | | 31 | | | | TK | 31 | | | | П | | П | | | 3 | П | П | 3 | | | | | \prod | | | | | | | | 1 | | | 3 | Ш | 上 | | | | | | |
| | 4 | | 7 | 11 | \square | | | 7 | 444 | | | | | | | | | · | | <u>~</u> | 1 | - | V | | | <u> </u> | | | - | 1 | | | 3 1 | | IF | 3 | TT | T | N | T | \prod | N | | |
| | | | 31 | | N | | | | | | | | | 1 | | | E | | | 33 | | | | 1 | | | | | | 1_[| | | | | 1 | 37 | | | 12 | | | 区 | | |
| | | | 7 | | 127 | | | | | | | | | | لسلم | | | | | ~ | | | | | | | | 1 1 | | 4 1 | | | 3 | | 1 | 4 | TT | — | 23 | | Tī | M | | |
| | | | 1 | TI | | \prod | TE | N I | | | | | | | | | 3 | | | | | | | ! | \coprod | | 丄 | | | | | | 1 | | | 3 | Ш | | ZZ | L_ | Ш | Z | | |

CARD O CONTAINS THE DDEF'S FOR THE 1627 PLOTTERS. IF THIS SYSTEM HAS ONLY ONE 1627, THEN ONLY ONE ENTRY IS REQUIRED IN THIS CARD.

CARD END IS THE "END EDIT CARD". PUNCH EXACTLY AS IS SHOWN.

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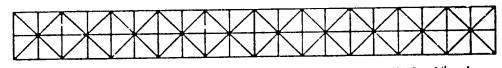
1627 FUNCTION TEST

PATTERN FOR PEN UP/PEN DOWN TEST

SCALE 3/4 = 1

F+GPRE +

PATTERN FOR REGISTRATION TEST



SCALE: 3/4 = 1

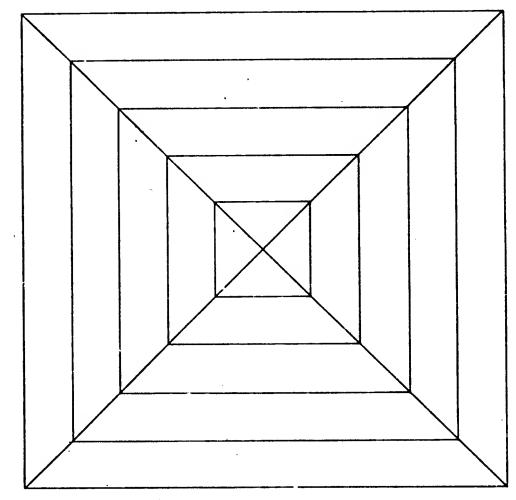
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1627 FUNCTION TEST

FIGURE 3

SWING TEST - PATTERN



SCALE: 3/4 = 1

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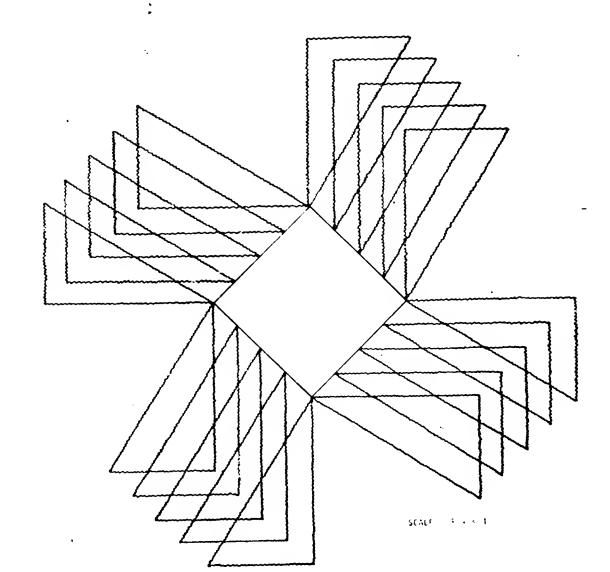
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FIGURE 4

STRESS TEST - WINDMILL PATTERN



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1627 FUNCTION TEST

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| | | | | | | | * | | | |
|----------------------|----|---|--------|----------|-----|------------------------|-----------------------|----|----------------------|--|
| 0000 |) | | | OR | 2 | ++2047 | | | ***** | |
| 0120 | : | | SEGI | N EOL | _ | 300 | | | 80500000 | |
| 0120 | | | | T EQL | - | BEGIN+1 | | | 80500010 | |
| 0128 | | | ENO | EG. | - | START+1 | | | 80500020 | |
| 0126 | • | | LOG | EQL | | ENO+1 | | | 80500030 | |
| 0130 |) | | | R EQL | | LOG+1 | | • | 80500040 | |
| 0131 | 1 | | REQD | | | ERROR+1 | | | 80500050 | |
| 0132 | ? | | RELO | | | REQOV+1 | | | 80500060 | |
| 0133 | 1 | | HALT | | | RELOV+1 | | | 80500070 | |
| | | | * | | | | | | 80500080 | |
| | | | • | | | | | | 80500090 | |
| | | | *** | • | | PROGRAM | STARTER TABLE ******* | | 80500100 | |
| | | | • | | | | THE TRUE THE THE | | 80500110 80500120 | |
| | | | • | | | | | | 80500120 | |
| 07FF | 0 | 0500 | PIO | OC | | /0500 | PROG IDENTIFICATION | | 80500140 | |
| 0800 | 0 | 0000 | RIO | OC | | /0000 | ROUTINE NUMBER | | 80500150 | |
| 0801 | 0 | 0000 | RAD | OC | | /0000 | ROUTINE AGORESS | | 80500160 | |
| 0802 | _ | 0000 | SHO | OC | | /0000 | BIT SWITCH FUNC O | | 80500170 | |
| 0803 | | 0000 | SW1 | OC | | /0000 | BIT SWITCH FUNC 1 | | 80500180 | |
| 0804 | | 0000 | SH2 | OC | | /0000 | BIT SWITCH FUNC 2 | | 80500190 | |
| 0805 | | 0000 | SW3 | DC | | /0000 | BIT SHITCH FUNC 3 | | 80500200 | |
| 0806 | _ | 0829 | ILP | DC | | RTO | INITIALIZATION AGOR | | 80500210 | |
| 0807 | - | 0829 | LPA | OC | | RTO | LOOP PROG AODR | | 80500220 | |
| 0808 | _ | 09CC | EPA | DC | | RTOVR | ENO FROG AODR | | 80500230 | |
| 0809 | _ | 000C | MLSCF | | | /0000 | 1ST MLSCF NORMAL | | 80500240 | |
| 080A | _ | 0000 | | DC | | /0000 | ZNO MLSCF BUSY | | 80500250 | |
| 0808 | | 0000 | | OC. | | /0000 | 3RO MLSCF INTR CK | | 80500260 | |
| 0800 | _ | FFFF | TERM | oc | | /FFFF | TERMINATOR | | 80500270 | |
| 080 0 080E | _ | 0BF0 | | DC | | PENO | PROGRAM ENO | | 80500280 | |
| OBOF | - | 0000 | | OC | | /0000 | | | 80500290 | |
| 0810 | _ | 0000 0000 | | DC | | /0000 | | | 80500300 | |
| 0811 | | 0000 | | 0C 0C | | /000 0 | | | 80500310 | |
| 0812 | | 0000 | | DC | | /000 0 /0000 | | | 80500320 | |
| | • | 0000 | * | 00 | | 70000 | | | 80500330 | |
| 0813 | ٥ | 0000 | ED1T1 | DC. | | /0000 | PLOTTER 1 | | 80500340 | |
| 0814 | 0 | 0000 | EO1T2 | - | | /0000 | PLOTTER 2 | | 80500350 | |
| | | | • | | | | V ZOTTEN Z | | 80500360 | |
| 0815 | 0 | 0000 | EOIT | DC | | /0000 | INTR AND CHAN USED | | 80500370 80500380 | |
| | | | • | | | | | | 80500390 | |
| | | | | | | | | | 80500400 | |
| | | | **** | | | ROUT INE | INTERRUPT ******** | | 80500410 | |
| | | | • | | | | | | 80500420 | |
| | _ | _ | • | | | | | | 80500430 | |
| 0816 | 0 | 0000 | PLOVA | DC | | /0000 | AREA CODE AND MOD | | 80500440 | |
| 0017 | _ | | * | | | | | | 80500450 | |
| 0817 | | 0000 | RECEV | | | /0000 | RETURN AGOR | SE | 80500460 | |
| 081A | | 0C000A92 | | XIO | L | SENSE | SENSE OSW | | 80500470 | |
| | - | 1000 | KEEP1 | | | | USE FOR TRAP | | 80500480 | |
| | | F4000A70 04000A0A | | EOR | L | K8000 | REMOVE SERVICE REQST | | 80500490 | |
| | | 67000A0A | 556611 | STO | L | ERBIT | SAVE OSW ERROR BITS | | 80500500 | |
| 0821 | | 68E7 | RECSH | | | CONT | GET ALSCF | | 80500510 | |
| | | 4C800817 | | STX | _ | MLSCF RECEV | SET MLSCF | | 80500520 | |
| | | *************************************** | | D3C | 1 | KECEV | RETURN TO MUNITOR | SX | 80500530 | |
| | | | | | | | | | 80500540 | |
| | | | | **** | ** | DSH TABLE | ************* | | 80500550 | |
| | | | | | - | TON THEE | | | | |
| | | | | | | | | | 80500570 80500580 | |
| 0324 | 00 | 44B0012C | PLBGN | 851 | 1 | BEGIR | CALL TO MONITOR | | 80500590 | |
| 0826 | | 07FF | | DC | - | PIO | | | 80500600 | |
| 0827 | | 0817 | | OC | | RECEV | INTERRUPT ENTRY ADDR | | 80500610 | |
| 0828 | 0 | FFFF | | OC | | /FFFF | | | 80500620 | |
| | | | • | | | | | | 80500630 | |
| | | | ***** | *** | *** | ******** | ******* | | 80500640 | |
| | | | * | | | | | | 80500650 | |
| | | | **** | | | KUU'INE (| - INITIALIZATION **** | | 80500660 | |
| | | | • | | | | | | 8050067D | |
| | | | | | | | • | | | |

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1627 FUNCTION TEST

| | | | | | | | | | • |
|--------|------|----------|----------|------|----|---------|-------------------------|------|----------------------|
| 0829 | 0 | 0000 | * RTO | DC | | 40000 | | | 80500680 |
| **** | • | 5500 | * | UL | | /0000 | RETURN ADDR | E | 80500690 80500700 |
| 082A | 0 | COEA | | LO | | EOIT | | | 80500705 |
| 0828 | 01 | 442809CC | | 851 | L | | +2 RELEASE DEVICE MINE | | |
| 0820 | 0 | C006 | | LD | _ | SW2 | HELLASE DEVICE HIME | | 80500706 |
| 082E | 0 | 180E | | SRA | | 14 | | | 80500710 |
| OB2F | 01 | 40040833 | | asc | | NBTHO, | E SCH ON BIT 1 | | 80500720 |
| 0831 | | COEI | | FO | • | EOIT1 | | | 80500730 |
| 0832 | | 7001 | | MOX | | XX | PLOTTER 1 ODEF | | 80500740 |
| 0833 | | COEO | NBTH | | | ÊÔ1T2 | BLOTTER 2 0055 | | 80500750 |
| 0834 | | 00E0 | XX | STO | | EOIT | PLOTTER 2 ODEF | | 80500760 |
| | - | 5555 | 20 | 310 | | 5011 | DDEF CONTROLS | | 80500770 |
| 0835 | 00 | 44800131 | LABE | | 1 | | | | 80500780 |
| 0837 | | 0849 | LADE | OC . | • | | REQUEST DEVICE | SC | 80500790 |
| 0838 | | 0815 | | OC. | | STOBY | BUSY ADDR | | 80500800 |
| 0839 | _ | 0816 | | DC | | EOIT | INTR AND CHAN | | 80500810 |
| 083A | _ | OBOC | | | | PLOVA | AREA CODE AND MOD | | 80500820 |
| 0034 | • | 0000 | - | DC | | TERM | TERMINATOR | | 80500830 |
| 0838 | ^ | 6205 | - | | _ | | | | 80500840 |
| | | C6000A90 | | LOX | _ | 2 5 | | | 80500850 |
| 083E | | | BUIL | _ | | SENT | LOAD FUNCTION | | 80500860 |
| 083F | | E014 | | ANO | | K0701 | | | 80500865 |
| | | E806 | | OR | | PLOVA | AREA CODE | | 80500870 |
| | | 06000A90 | | STO | | 2 SENT | SET IN I/O COMMAND | | 80500880 |
| 0842 | _ | 72FE | | MOX | 2 | -2 | | | 80500890 |
| 0843 | 0 | 70FB | | MOX | | BUILD | | | 80500900 |
| | | | * | | | | | | 80500910 |
| | | 6600084E | | LOX | | RUNIT | LO XR2 WITH RE-ENTRY | | 80500920 |
| 0846 | | 6AC2 | | STX | 2 | MLSCF | SET MLSCF | | 80500930 |
| 0847 | 01 | 4C800829 | | BSC | 1 | RTO | RETURN TO MONITOR | x | 80500940 |
| | | | | | | | | | 80500950 |
| | | 65000B35 | STOBY | LOX | Ĺl | LABEL | GET BUSY ADOR | | 80500960 |
| 0848 | | 6980 | | STX | 1 | MLSCF | SET MLSCF | | 80500970 |
| OB4C | 00 | 4C800120 | | BSC | 1 | START | RETURN TO MONITOR | x | 80500980 |
| | | | | | | | West of the Month of | ^ | |
| | | | | | | | | | 80500990 |
| 084E | 01 | 44000933 | RUNIT | BSI | L | BSWCK | CHECK BIT SWITCH | sc | 80501000 |
| 0850 | 0 | 6201 | | LOX | | 1 | SET ROUTINE 1 | 36 | 80501010 |
| 0851 | 01 | 4C00090F | | BSC | Ľ | RTSET | SET ROUTINE | | 80501020 |
| | | | | | - | | SE! MOUTINE | | 80501030 |
| 0853 | 0 | 0701 | K0701 | OC. | | /0701 | REMOVE AREA CODE MSK | | B0501040 |
| | | | * | | | ,,,,, | MENUAL WEN CORE MOV | | 80501045 |
| | | | **** | | | POUTTNE | 1- OCTAGON PEN UP-DOHN | | 80501050 |
| | | | * | | | KOOIINE | TO DETAGON PEN UP-DUNN | | 80501060 |
| 0854 | 01 | 44000A38 | RT1 | BSI | L | READY | CHECK CTATIC | | 80501070 |
| | | | * | 031 | _ | KENUT | CHECK STATUS | ESC | |
| 0656 | 01 | C4000A6F | • | LO | L | K0150 | CONCTANT OF 150 | | 80501090 |
| 0858 | | 63F1 | | FOX | | -15 | CONSTANT OF 150 | | 80501100 |
| | | D7000A83 | BOOT | STO | | | | | 80501110 |
| 0858 | | 7302 | B00 1 | | | NN+15 | STORE MOVE COUNT | | 80501120 |
| 085C (| | 70FC | | MOX | , | 2 | | | 80501130 |
| 00,00 | • | TOTAL | | MOX | | BOOT | | | 80501140 |
| 0850 6 | ,, | 65000A9A | • | | | | | | 80501150 |
| | | 60000A71 | | FOX | | RTIST | START COMMANO ADDR | | 80501160 |
| | | 44000A71 | | STX | | LOOK | POINTS TO COMMANO | | 80501170 |
| 0001 | ,, | TTUUUAUL | _ | BSI | L | OISP | USE DISPATCH ROUTINE | SC | 80501180 |
| 0043 0 | | | | | | | | | 80501190 |
| 0003 | | 4000903 | | BSI | L | | CHECK BIT SWITCH | SC | 80501200 |
| 0865 0 | | | | LOX | | 2 | NEW ROUTINE NUMBER | | 80501210 |
| 0800 0 | 11 4 | 4C00090F | | BSC | L | RTSET | | X | 80501220 |
| | | | | | | | | | 80501230 |
| | | | • | | | | | | 80501240 |
| | | | **** | | | ROUTINE | 2- REGISTRATION TEST ** | | 80501250 |
| | | | • | | | | | | 80501260 |
| | _ | | * | | | | | | 80501270 |
| 0568 0 | 1 4 | 4000A38 | RT2 | BSI | L | REACY | CHECK STATUS | ESC | 80501270 |
| | | | • | | | | | - 36 | 80501280 |
| | | 7000064 | | LOX | L3 | 100 | SET UP COUNT | | |
| 086C 0 | 1 6 | FOODAB2 | | STX | L3 | | 22. 0. 00011 | | 80501300 |
| | | | | | | | | | 80501310 |
| | | | | | | | | _ | |

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| | | COR THE | SANO CASTER | PART | Mr. Classes |
| MATRITENANCE I | DIAGNOSTIC PROGRAM | FUK INC | 1900 313.54 | 8105 | 2 |

1627 FUNCTION TEST

| | *** | L3 SW | | • | 10501320 |
|---|-----------|------------|-----------------------|-----|----------|
| 986E 01 6F900A80 | STX | | | | 0501330 |
| 9870 01 6F00UA74 | STX | L3 NN | | - (| 10501340 |
| 0872 01 6F000A76 | STX | L3 SS | | - 1 | 30501350 |
| 0874 01 6F000A7C | STX | L3 NE | | | 0501360 |
| 0876 01 6F000A7E | STX | L3 SE | | | 0501370 |
| 0878 00 67000032 | LDX | L3 50 | | | 80501380 |
| 087A 01 6F000A78 | STX | L3 EE | | | 80501390 |
| 087C 01 6F000A7A | STX | L3 WW | | | 0501400 |
| 0010 01 01 000 | • | | | | |
| | LDX | L1 RT2ST | START COMMAND AODR | | 80501410 |
| 087E 01 65000AEC | STX | L1 LDDK | POINTS TO COMMAND | | 80501420 |
| 0580 01 6D000A71 | LDX | 3 5 | | | 80501430 |
| 0882 0 6305 | | L3 EXTRA | LGOP COUNT | | 80501440 |
| 0883 01 6F000A68 | STX | | USE DISPATCH ROUTINE | SC | 80501450 |
| 0885 01 44000AOC | 851 | L DISP | 032 333 | | 80501460 |
| ! | • | | | | 80501470 |
| 0887 01 74010A71 | MDX | L LOOK+1 | CHANGE COUNT | | 80501480 |
| 0889 OU 670003E8 | LDX | L3 1000 | CHANGE COOK! | | 80501490 |
| 0888 01 6F000A78 | STX | L3 EE | | | 80501500 |
| | • | | THE STATE OF THE | | 80501510 |
| 088D 01 44000AOC | REGOL 851 | L DISP | USE DISPATCH ROUTINE | 36 | 80501520 |
| 088F 01 74FE0A71 | MDX | L LDDK,-2 | | | 80501530 |
| 0891 01 74FF0A68 | MDX | L EXTRA-1 | REDUCE LDDP CDUNT | | |
| | MDX | REG01 | | | 80501540 |
| 0893 0 70F9 | * | | | | 80501550 |
| | • | L LOOK,3 | | | 80501560 |
| 0894 01 74030A71 | MDX | 3 5 | | | 80501570 |
| 0896 0 6305 | LDX | | LDDP CDUNT | | 80501580 |
| 0897 01 6F000A68 | STX | L3 EXTRA | EDDI CDO | | 80501590 |
| | • | | USE DISPATCH ROUTINE | SC | 80501600 |
| 0899 C1 44000AOC | REGO2 851 | L OISP | OSE DISPATEN KOOTINE | •• | 80501610 |
| 089B 01 74FE0A71 | HDX | F FDOK 5 | | | 80501620 |
| 089D 01 74FF0A68 | MDX | L EXTRA:-1 | | | 80501630 |
| 089F 0 70F9 | MDX | REG02 | | | 80501640 |
| 0891 0 1019 | | | | | 80501650 |
| 0 4304 | LDX | 3 10 | | | |
| 08A0 0 630A | STX | L3 EXTRA | | | 80501660 |
| 08A1 01 6F000A68 | MDX | L LOOK,3 | | | 80501670 |
| 08A3 01 74030A71 | HUA | £ 200 | | | 80501680 |
| | | L DISP | USE DISPATCH ROUTINE | SC | 80501690 |
| 08A5 01 44000AOC | REGO3 851 | | | | 80501700 |
| 08A7 01 74F80A71 | MDX | L LOOK,-8 | | | 80501710 |
| 08A9 01 74FF0A68 | XOM | | | | 80501720 |
| 08AB 0 70F9 | MDX | REG03 | | | 80501730 |
| | | | | | 80501740 |
| 08AC 01 74090A71 | MDX | L LOOK +9 | | | 80501750 |
| 08AE 0 6332 | LüX | 3 50 | | | 80501760 |
| 08AF 01 6F000A76 | STX | | | | 80501770 |
| 00AF 01 0F000AF0 | LDX | | | | |
| 0881 00 670003E8 | STX | | | | 80501780 |
| 0883 01 6F000A7A | 851 | | USE OISPATCH ROUTINE | SC | 80501790 |
| 0885 01 44000AOC | | | | | 80501800 |
| W | * 851 | L BSHCK | CHECK BIT SWITCH | SC | 80501810 |
| 0887 01 440009D3 | | | | | 80501820 |
| 0889 0 6203 | FDX | | | X | 80501830 |
| 08BA 01 4C0009DF | 850 | L RTSET | | | 80501840 |
| | • | | | | 80501850 |
| | | | | | 80501860 |
| | **** | RDUTINE : | 3- SWING TEST ******* | | 80501870 |
| | • | | | | 80501880 |
| | • | | | 250 | 80501890 |
| 088C 01 44000A38 | RTA 851 | L READY | CHECK STATUS | ESC | 80501900 |
| UBBC UI 77000736 | | | | | |
| | LD | 3 40 | | | 80501910 |
| 0.8E 0 6328 | ST | | | | 80501920 |
| 088F 0 682C | | ` | | | 80501930 |
| 08CO 00 670000C8 | LD | • | | | 80501940 |
| 08C2 01 6F000A74 | ST | | | | 80501950 |
| 0864 0 6364 | LD | | | | 80501960 |
| 08C5 01 6F000A7C | ST | | | | 80501970 |
| 0867 0 6332 | LD: | | | | 80501980 |
| 28C8 01 6F000A78 | ST. | K L3 EE | | | 80501990 |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | • | | | | |
| | | | | | |

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1627 FUNCTION TEST

| | 4.69 | | RT3ST | . FART COMMAND ADDR | | 80502000 |
|---------------------------------|------------|-----|-----------------|-------------------------|------|------------------------------|
| 08CA 01 65000808 | LDX | | LOOK | | | 80502010 |
| 08CC 01 6D000A71 | STX BSI | | DISP | USE DISPATCH ROUTINE | SC | 80502020 |
| 08CE 01 44000A0C | 21 | L | 0131 | | | 80502030 |
| | MDX | L | LOOK • 1 | | | 80502040 |
| 08D0 01 74010A71 | LDX | | 500 | | | 80502050 |
| 08D2 00 670001F4 | STX | L3 | | | | 80502060 |
| 08D4 01 6F000A82 | STX | L3 | | | | 80502070 |
| 0806 01 6F000A7E | XTX | L3 | | | | 80502080 |
| 08D8 01 0F000A80 | LDX | | 25 | | | 80502090 |
| 080A 0 6319 | STX | L3 | | | | 80502100 |
| 0808 01 6F000A76 | STX | 13 | | | | 80502110 |
| OBDD 01 6F000A7A | LDX | | 1000 | • | | 80502120 |
| 08DF 00 670003E8 | xTx | L3 | | | | 80502130 |
| 08E1 01 6F000A74 | STX | L3 | | | | 80502148 |
| 08E3 01 6F000A78 | | | | | | 80502150 |
| 4305 | LDX | 3 | 5 | | | 80502160 |
| 08E5 0 6305 | STX | | SQRCT | SQUARE COUNT | | 805D2170 |
| 08E6 01 6F000A72 | | | | | | 80502180 805021 90 |
| ORFR 0 6302 | SWNG1 LDX | 3 | 2 | | | 80502290 |
| 08E8 0 6302 08E9 01 6F000A73 | STX | L3 | TRICT | SEGMENTED LINE COUNT | | 80502210 |
| 08E8 00 67000028 | SWNG2 LDX | L3 | 40 | | | 80502210 |
| 08ED 01 6F000A68 | STX | L3 | EXTRA | LOOP COUNT | | 80502230 |
| 08EF 01 44000AOC | SWNG3 8SI | L | DISP | USE DISPATCH ROUTINE | sc | 80502240 |
| 08F1 01 74FF0A71 | MOX | L | LOOK,-1 | | | 80502250 |
| 08F3 01 74FF0A68 | MDX | L | EXTRA,-1 | A COMPANY | | 80502260 |
| 08F5 0 70F9 | MOX | | SWNG3 | DO ANDTHER SEGMENT | | 80502270 |
| Uses o 100 s | | | | | | 80502280 |
| 08F6 01 74020A71 | MDX | L | LOOK . 2 | | | 80502290 |
| 08F8 01 74FF0A73 | MDX | L | TRICT1 | | | 80502300 |
| 08FA 0 70F0 | MDX | | SWNG2 | DO ANDTHER LINE | | 80502310 |
| OCI A C 1010 | * | | | | | 80502320 |
| OBFB 01 749C0A74 | MDX | L | NN,-100 | | | 80502330 |
| 08FD 01 749C0A74 | MDX | L | NN ,-100 | HDX WILL HDP THIS | | 80502340 |
| 08FF 0 1000 | KEEPZ NOP | | | MOX MIET HOL 11112 | | 80502350 |
| 0900 01 749C0A78 | MDX | | EE,-100 | | | 80502360 |
| 0902 01 749C0A78 | MOX | | EE,-100 | MDX WILL SKIP THIS | | 80502370 |
| 0904 0 1000 | KEEP3 NOP | | | ADJ LINE LENGTH | | 80502380 |
| 0905 01 74F808EC | KDX | | 2MMG2+1+ | MDX WILL SKIP THIS | | 80502390 |
| 0907 0 1000 | KEEP4 NOP | | | USE DISPATCH ROUTINE | SC | 80502400 |
| 0908 01 44000AOC | 851 | | DISP | 035 9134 21011 11001011 | | 80502410 |
| 090A 01 74F70A71 | MDX | | LDOK9 SQRCT1 | | | 80502420 |
| 090C 01 74FF0A72 | MDX | | SWNG1 | DD ANOTHER SQUARE | | 80502430 |
| 090E 0 70D9 | MDX | • | 2 MIAG T | DD AMERICA | | 80502440 |
| | MDX | L | LOOK . 10 | | | 80502450 |
| 090F 01 740A0A71 | LDX | | 3 1000 | | | 80502460 |
| 0911 00 670003E8 | ST | | 3 NN | | | 80502470 |
| 0913 01 6F0G0A74 | ST | | 3 \$ S | | | 80502480 |
| 0915 01 6F000A76 | * | ` - | <i>-</i> ••• | | | 80502490 |
| | 851 | L | DISP | USE DISPATCH ROUTINE | SC | 80502500 |
| 0917 01 44000A0C | MD | | 7 1 1 | | | 80502510 |
| 0919 01 74010A71 | LD | | 3 2 | | | 80502520 |
| 0918 0 6302 | ST | | 3 TRICT | SEGMENTED LINE COUNT | | 80502530 |
| 091C 01 6F000A73 | LD | • | 3 25 | | | 80502540 |
| 091E 0 6319 091F 01 6F000A82 | | | 3 NH | | | 80502550 |
| 0921 01 6F000A7C | | | 3 NE | | | 80502560 |
| 0921 01 85000270 | | | | | | 80502570 |
| 0923 0 6314 | SWNG5 LD | X | 3 20 | | | 80502580 |
| 0925 0 6514 0924 01 6F000A68 | ST | | 3 EXTRA | LOOP COUNT | | 80502590 80502600 |
| 0924 01 6F000A0C | SWNG4 85 | | . GISP | USE OISPATCH ROUTING | E SC | |
| 0928 01 74FF0A71 | MD | | LODK,-1 | | | 80502610 - 80502620 |
| 0928 01 74FF0A68 | MO | | EXTRA,-1 | | | 80502630 |
| 092C 0 70F9 | MD | X | SWNG4 | DD ANOTHER LINE | | 80502640 |
| 4,54 | • | | | | | 80502650 |
| 092D 01 74020A71 | MD | X I | F00K+5 | | | 80502660 |
| 092F 01 74FF0A73 | MD | | | DO AUDTUFO A THE | | 80502670 |
| 0931 0 70F1 | MD | X | SWNG5 | DD ANDTHER LINE | | 007050.0 |
| | | | | | | |
| | | | | | | PROG ID |

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1627 FUNCTION TEST

| 74010A71 44000A0C 406A 6206 4C00090F 0000 6B28 6B2E 6B35 6305 6F000A73 6356 6F000A6B 44000A0C 74FE0A71 74FF0A6B | * * * * * * * * * * * * * * * * * * * | STX STX STX LOX STX LOX STX | 3 3 3 L3 LL | /0000 CHG1+1 CHG2+1 CHG3+1 | ORAW SQUARE CHECK BIT SWITCH NEW ROUTINE ONTROL ************************************ | PR02 | 80503110 80503120 80503130 80503140 80503150 80503170 80503170 80503180 80503190 80503210 80503220 80503230 80503240 80503250 80503250 80503270 80503270 80503280 80503290 80503310 80503310 80503310 80503310 | |
|--|---|---|---|--|--|----------------------------|--|------------|
| 74010A71 44000A0C 406A 6206 4C00090F 0000 6B28 6B2E 6B35 6F000A73 6356 6F000A6B | TCNTL | BSI LOX BSC OC STX STX LOX STX LOX STX | L 2 L 3 3 3 3 L 3 L 3 L 3 | BSWCK 6 RTSET TRIANGLE CO /0000 CHG1+1 CHG2+1 CHG3+1 5 TRICT 86 EXTRA OISP | CHECK BIT SWITCH NEW ROUTINE ONTROL **************** RETURN AOOR TRIANGLE COUNT START TRIANGLE | SE PRO1 PRO2 PRO3 | 80503120 80503130 80503140 80503150 80503160 80503170 80503180 80503200 80503210 80503220 80503220 80503230 80503250 80503250 80503250 80503250 80503250 80503250 80503270 80503280 80503290 80503310 | |
| 0000 6828 6826 6835 66000A73 | TCNTL | BSI LOX BSC OC STX STX LOX STX LOX STX | L 2 L 3 3 3 13 13 13 | BSWCK 6 RTSET TRIANGLE CO /0000 CHG1+1 CHG2+1 CHG3+1 5 TRICT 86 EXTRA | CHECK BIT SWITCH NEW ROUTINE ONTROL **************** RETURN AOOR TRIANGLE COUNT START TRIANGLE | SE PRO1 PRO2 PRO3 | 80503120 80503130 80503140 80503150 80503160 80503170 80503180 80503200 80503210 80503220 80503230 80503240 80503250 80503260 80503270 80503280 80503290 80503290 | |
| 74010A71 44000A0C 406A 6206 4C00090F 0000 6B28 6B2E 6B35 6305 6F000A73 | * * * * * * * * * * * * * * * * * * * | BSI LOX BSC OC STX STX STX LOX LOX | L 2 L 3 3 3 3 13 3 | BSNCK 6 RTSET TRIANGLE CO /0000 CHG1+1 CHG2+1 CHG3+1 5 TRICT | CHECK BIT SWITCH NEW ROUTINE ONTROL ************************************ | SC X SE PRO1 PRO2 | 80503120 80503130 80503140 80503150 80503160 80503170 80503180 80503190 80503210 80503220 80503220 80503250 80503250 80503250 80503250 80503260 80503270 80503280 80503290 | |
| 74010A71 44000A0C 406A 6206 4C00090F 0000 6B28 6B2E 6B35 6305 6F000A73 | * * * * * * * * * * * * * * * * * * * | BSI LOX BSC OC STX STX STX LOX LOX | L 2 L 3 3 3 3 13 3 | BSNCK 6 RTSET TRIANGLE CO /0000 CHG1+1 CHG2+1 CHG3+1 5 TRICT | CHECK BIT SWITCH NEW ROUTINE ONTROL ************************************ | SC X SE PRO1 PRO2 | 80503120 80503130 80503140 80503150 80503160 80503170 80503180 80503190 80503210 80503220 80503230 80503240 80503250 80503250 80503250 | |
| 74010A71 44000A0C 406A 6206 4C00090F 0000 6B28 6B2E 6B35 6F000A73 | * * * * * * * * * * * * * * * * * * * | BSI LOX BSC OC STX STX STX LOX | L 2 L 3 3 3 3 3 3 | BSWCK 6 RTSET TRIANGLE CC /0000 CHG1+1 CHG2+1 CHG3+1 5 | CHECK BIT SWITCH NEW ROUTINE ONTROL ************************************ | SC X SE PRO1 PRO2 | 80503120 80503130 80503140 80503150 80503160 80503170 80503180 80503200 80503210 80503220 80503230 80503240 80503250 80503250 | |
| 74010A71 44000A0C 406A 6206 4C00090F 0000 6B28 6B2E 6B35 6305 | * ***** * | BSI LOX BSC OC STX STX STX LOX | L 2 L 3 3 3 3 3 3 | BSWCK 6 RTSET TRIANGLE CC /0000 CHG1+1 CHG2+1 CHG3+1 5 | CHECK BIT SWITCH NEW ROUTINE ONTROL ************************************ | SC X SE PRO1 PRO2 | 80503120 80503130 80503140 80503150 80503160 80503180 80503180 80503190 80503200 80503210 80503220 80503230 80503240 80503250 | |
| 74010A71 44000A0C 406A 6206 4C00090F | * ***** * | BSI LOX BSC OC STX STX STX | L 2 L 3 3 3 3 3 | BSWCK 6 RTSET TRIANGLE CO /0000 CHG1+1 CHG2+1 CHG3+1 | CHECK BIT SWITCH NEW ROUTINE | SC X SE PRO1 PRO2 | 80503120 80503130 80503140 80503150 80503160 80503170 80503180 80503190 80503200 80503210 80503220 80503230 80503240 | |
| 74010A71 44000A0C 406A 6206 4C00090F | * ***** * | BSI LOX BSC OC STX STX | L 2 L 3 3 | BSWCK 6 RTSET TRIANGLE CO /0000 CHG1+1 CHG2+1 | CHECK BIT SWITCH NEW ROUTINE | SC X SE PRO1 PRO2 | 80503120 80503130 80503140 80503150 80503160 80503170 80503180 80503190 80503200 80503210 80503220 80503230 | |
| 74010A71 44000A0C 406A 6206 4C00090F | * ***** * | BSI LOX BSC | L 2 L 3 | BSWCK 6 RTSET TRIANGLE CO /0000 CHG1+1 | CHECK BIT SWITCH NEW ROUTINE | SC X SE PRO1 | 80503120 80503130 80503140 80503150 80503160 80503170 80503180 80503190 80503200 80503210 80503220 | |
| 74010A71 44000A0C 406A 6206 4C00090F | * ***** * | BSI LOX BSC | L L ² | BSWCK 6 RTSET TRIANGLE CO | CHECK BIT SWITCH NEW ROUTINE | SC X | 80503120 80503130 80503140 80503150 80503160 80503170 80503180 80503190 80503200 80503210 | |
| 74010A71 44000A0C 406A 6206 4C00090F | * ***** * | BSI LOX BSC | L 2 | BSWCK 6 RTSET TRIANGLE CO | CHECK BIT SWITCH NEW ROUTINE | SC X | 80503120 80503130 80503140 80503150 80503160 80503170 80503180 80503190 80503200 | |
| 74010A71 44000A0C 406A 6206 | * | BSI LOX | L 2 | BSWCK 6 RTSET | CHECK BIT SWITCH NEW ROUTINE | sc | 80503120 80503130 80503140 80503150 80503160 80503170 80503180 | |
| 74010A71 44000A0C 406A 6206 | • | BSI LOX | L 2 | BSWCK 6 RTSET | CHECK BIT SWITCH NEW ROUTINE | sc | 80503120 80503130 80503140 80503150 80503160 80503170 | |
| 74010A71 44000A0C 406A 6206 | | BSI LOX | L 2 | BSWCK 6 | CHECK BIT SWITCH | sc | 80503120 80503130 80503140 80503150 80503160 | |
| 74010A71 44000A0C 406A 6206 | • | BSI LOX | L 2 | BSWCK 6 | CHECK BIT SWITCH | sc | 80503120 80503130 80503140 80503150 | |
| 74010A71 44000A0C 406A 6206 | • | BSI LOX | L 2 | BSWCK 6 | CHECK BIT SWITCH | sc | 80503120 80503130 80503140 | |
| 74010A71 44000A0C | • | BSI | L | BSWCK | CHECK BIT SWITCH | | 80503120 80503130 | |
| 74010A71 44000A0C | • | 831 | | | | | 80503120 | |
| 74010A71 | | | | OISP | ORAW SQUARE | SC | | |
| 74010A71 | | | | 0210 | | | 00502 | |
| | | Mr. ~ | | LUUKel | | | 80503100 | |
| 6F000A80 | | STX | L3 | | | | 80503090 | |
| | | | | | | | 80503080 | |
| 6F000A7C | | STX | | _ | | | 80503070 | |
| 6F000A82 | | STX | | | | | 80503060 | |
| 670000C8 | | LCX | | | | | 80503050 | |
| | | | | | | | 80503040 | |
| 4012 | | 851 | | TCNTL | USE TRIANGLE CONTROL | SC | 80503030 | |
| 67000A82 | | LDX | L3 | NW | | | | |
| | | 731 | | . 011. 2 | TO THE PROPERTY OF THE PERTY OF | 30 | | |
| 4015 | | | -3 | _ | USE TRIANGLE CONTROL | SC | | |
| 67000AR0 | • | LEX | 13 | SH | | | | |
| 4010 | | D 3 I | | ICNIL | USE IKIANGLE CUNIKOL | 20 | | |
| | | | L3 | | HEE TRIANCIE CONTRO | | | |
| 67000A7E | - | 1 50 | | ** | | | 80502950 | |
| 4018 | | BSI | | ICNTL | USE TRIANGLE CONTROL | SC | 80502940 | |
| | | LOX | L3 | _ | | | 80502930 | |
| | • | | | | | | 80502920 | |
| 70FC | | MOX | | WMIL1 | | | 80502910 | |
| 7202 | | MOX | | 2 | | | 80502900 | |
| 06000A83 | WMILI | | | | | | 80502890 | |
| L C4000A6D | | LD | L | K0002 | MOVE COUNT | | | |
| _ | | _ | | | | | | |
| 74010471 | • | MOY | | LOOK - 1 | | | | |
| 1 44UUUAUC | | RZI | L | DISP | USE DISPATCH ROUTINE | 20 | | |
| | | STX | | | | | 80502830 | |
| 1 67000828 | | LOX | | | START COMMANO AGOR | | 80502820 | |
| 1 6F000A74 | | STX | | | | | 80502810 | |
| 1 6F000A7C | | STX | | | | | 80502800 | |
| 0 67000164 | | LDX | | | SET UP COUNT | | 80502790 | |
| | | _ | _ | · | | | 80502780 | |
| 1 44000A38 | RT4 | 851 | L | READY | CHECK STATUS | ESC | 80502770 | |
| | • | | | | | | | |
| | | | | | HIMMILL VESION CTOT | | | |
| | | ı | | ROUTINE 4- | WINOMILL DESIGN **** | | | |
| | • | | | | | | | |
| . 40000706 | | 036 | _ | W13E1 | | ^ | | |
| | | | | | NEW KOUIINE NUMBER | | | |
| | | | | | _ | SÇ | | |
| 1 44000000 | • | | | Deucus. | C | | | |
| | _ | | | | | | | |
| | 1 44000A38 0 67000164 1 67000A7C 1 67000A7C 1 67000A71 1 44000A0C 1 74010A71 1 C4000A6D 1 C4000A6D 1 C4000A7C 4018 1 67000A7C 4018 1 67000A7C 4018 1 67000A82 4012 1 67000C8 667000A7C 667000A7C | 6204 1 4C0009DF | 1 44000903 6204 1 4C0009DF 85C * ****** * 1 44000A38 RT4 85I * 0 67000164 LDX 5TX 6F000A7C STX 1 6F000A71 STX 1 64000A0C BSI 1 C4000A6D LDX 70FC MOX 1 67000A82 MMIL1 STO 7202 70FC LDX 1 67000A7C A018 BSI 1 67000A7C STX 1 6F000A7C STX 1 6F000A7C STX | 1 44000903 6204 1 4C0009DF 8SC L 4 440009DF 8SC L 4 44000A38 RT4 SSI L 5 67000A7C 1 66000A7C 1 6261 1 62 | 1 44000903 6204 1 4C0009DF 8SI L BSWCK LDX 2 4 8SC L RTSET ** ** ** ** ** ** ** ** ** ** ** ** * | 1 44000903 | 1 44000903 | 1 44000903 |

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1627 FUNCTION TEST

| 097 | 01 | 74030A71 | | MOX | L | LOOK,3 | | | 80503360 | |
|--------------|------|-------------------|--------|-------|----|-------------------|----------------------|----------|----------|--|
| 0971 | F 0 | 6328 | | LDX | 3 | 43 | | | 80503370 | |
| 0980 | 01 | 6F000A6B | | STX | | EXTRA | | | 80503380 | |
| | | | | | | | | | 80503390 | |
| 098 | 2 01 | 44000A0C | SIDE2 | 851 | L | DISP | SIDE TWO | SC | 80503400 | |
| | | 74FE0A71 | | MDX | ī | LOOK2 | | - | 80503410 | |
| | | 74FF0A68 | | MDX | ī | EXTRA,-1 | | | 80503420 | |
| 098 | | 70F9 | | MDX | • | SIDE2 | | | 80503430 | |
| 0,00 | | | | 1107 | | 31002 | | | 80503440 | |
| 008 | 0.1 | 74030A71 | • | MDX | L | LOCK . 3 | | | 80503450 | |
| 098 | | 6356 | | LDX | | 86 | | | 8050346C | |
| | | 6F000A6B | | STX | | EXTRA | | | | |
| 0360 | . 01 | Broodabb | | 317 | LJ | EATRA | | | 80503470 | |
| AGRI | | 44000A0C | \$10E3 | 124 | L | OISP | SIDE THREE | sc | 80503480 | |
| | | 74FD0A71 | 21053 | MOX | _ | | 210E IMKEE | 2C | 80503490 | |
| | | 74FF0A6B | | MOX | L | LOOK,-3 EXTRA1 | | | 80503500 | |
| 0994 | | 70F9 | | MOX | | SIOE3 | | | 80503510 | |
| 037 | | 1019 | | HUX | | 21053 | | | 80503520 | |
| 8005 | | 74300A7C | CHG1 | MOX | | NE 40 | | | 80503530 | |
| | | | CLGI | | Ļ | NE,48 | | PHOT | 80503540 | |
| | | 74C40A71 | | MOX | Ļ | LODK.4 | TREALIST COURT | | 80503550 | |
| | - | 74FF0A73 | | MOX | L | TRICT,-1 | TRIANGLE COUNT | | 80503560 | |
| 0998 | | 7006 | • | MDX | | TOP | | | 80503570 | |
| 8000 | ٠., | 7/000476 | • | 40- | | N | | | 80503580 | |
| | _ | 74000A7C | CHG2 | MDX | L | NE -48 | | PMOZ | 80503590 | |
| | | 74030A71 | | MOX | L | LDOK,3 | | . | 80503600 | |
| UYAC | , 01 | 4C80096C | _ | 8 S C | I | TCNTL | RETURN TO PROG | SX | 80503610 | |
| | | | * | | | | | | 80503620 | |
| | | 44000A0C | TOP | 128 | L | OISP | USE DISPATCH ROUTINE | SC | 80503630 | |
| | | 74000A7C | CHG3 | MOX | L | NE,-48 | | PM03 | 80503640 | |
| _ | | 74F30A71 | | MOX | L | LOOK 13 | | | 80503650 | |
| 0948 | . 0 | 70CA | | MDX | | RUN | DD ANDTHER TRIANGLE | | 80503660 | |
| | | | • | | | | | | 80503670 | |
| | | | • | | | | | | 80503680 | |
| | | | **** | | | RDUTINE 5- | MANUAL CONTROL **** | | 80503690 | |
| | | | * | | | | | | 80503700 | |
| | | | * | | | | | | 80503710 | |
| | | 67000B6D | RT5 | LOX | L3 | RT5ST | START COMMANO AGOR | E | 80503720 | |
| | | 6F000A71 | | STX | L3 | LOOK | POINTS TO COMMANO | | 80503730 | |
| - | | C4000804 | | LO | L | SW2 | | | 80503740 | |
| 09AF | | 1002 | | SLA | | 2 | | | 30503750 | |
| 0980 | - | 4820 | | B SC | | Z | | | 80503760 | |
| 0981 | - | 7007 | | MOX | | RT5A | BCH TO MANUAL CNTL | | 80503770 | |
| 0982 | | 4020 | | BSI | | BSWCK | CHECK BIT SWITCH | SC | 80503780 | |
| | | 670009A9 | | T DX | | RT5 | PICK UP MLSCF ENTRY | | 80503790 | |
| | | 6F000809 | | STX | L3 | MLSCF | SET MLSCF | | 80503800 | |
| 0987 | 00 | 4C800120 | | BSC | I | START | LOOP THRU MONITOR | X | 80503810 | |
| | | | • | | | | | | 80503820 | |
| | | 67000989 | RT5A | LDX | | RT5A | MODIFY RETURN AGOR | | 80503830 | |
| | | 6F000820 | | STX | | RECSW+1 | FOR INTERRUPT RTNE. | | 80503840 | |
| | | C4000804 | | TO | L | SW2 | BIT SWITCH STORAGE | | 80503850 | |
| 098F | | 1802 | | SRA | | 2 | | | 80503860 | |
| 0 900 | _ | 100A | | SLA | | 10 | | | 80503870 | |
| | | 04000A97 | | STO | L | SBSW2 | NEW COMMANO | | 80503880 | |
| | - | 44200A 0 C | | BSI | L | OISP,Z | TEST FOR END OF RINE | SC | 80503890 | |
| | | 67000A2D | | LOX | L3 | CONT | | | 80503900 | |
| 09C7 | 01 | 6F000820 | | STX | L3 | RECSW+1 | RESTORE RETURN AGOR. | | 80503910 | |
| 0909 | 0 | 4009 | | BSI | | BSWCK | CHECK BIT SWITCH | SC | 80503920 | |
| | | | • | | | | | | 80503930 | |
| | | | • | | | | | | 80503940 | |
| 09ÇA | 00 | 4C80012E | RTENO | 8SC | 1 | ENO | GO TO MONITOR | X | 80503950 | |
| | | | | | | | | | 80503960 | |
| 0900 | 0 | 0000 | RTOVR | DC | | /0000 | RETURN ADDR | SE | 80503970 | |
| | | | | | | | | . – | 80503980 | |
| | | 44800132 | | 851 | I | RELOV | RELEASE DEVICE | SC | 80503990 | |
| | 1 | 0815 | | DC | | EOIT | | | 80504000 | |
| 09C F | | | | DC | | TERM | TERMINATOR | | 80504010 | |
| 09CF C9D0 | 1 | 080C | | - | | | | | UUJUTULU | |
| C9D0 | _ | 030C 4C8009CC | | 8SC | 1 | RTOVR | RETURN TO PROGRAM | SX | 80504020 | |

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1627 FUNCTION TEST

OATE EC NO.

1627 FUNCTION TEST

| | | | **** | **** | *** | ******* | •••••• | | 80584048 |
|---------------|----|--------------|-------|------|-----|----------|-------------------------|----|--|
| | | | • | | | | • | | 80504050 |
| | | | **** | • | | COMMON S | SUB ROUTINES ******** | | 80584068 |
| | | | | | | | | | 80504070 |
| | | | | | | | | | 80504080 |
| | | | **** | | | ROUTINE | BIT SWITCH CHECK ****** | | 80504090 |
| | | | | | | | | | 80504100 |
| 09 03 | 0 | 0000 | BSHCK | DC | | /0000 | RETURN ADDRESS | SE | 80504110 |
| 0904 | 01 | C4D008D3 | | LD | L | SW1 | BIT SWITCH STORAGE | | 80504120 |
| 0906 | 01 | 40980903 | | 8 SC | 1 | BSWCK.+- | | SX | 80504130 |
| 0904 | 01 | E4000A6E | | ANO | L | KOOD7 | SAVE ROUTINE NUMBER | | 80504140 |
| 09DA | 01 | 04000800 | | STO | L | RIO | STORE ROUTINE NUMBER | | 80504150 |
| | | 66800800 | | FOX | 12 | RIO | LOAO XR 2 INDERCT | | 00504160 |
| 09D€ | 0 | 7002 | | MDX | | RERUN | | | 80504170 |
| | | | | | | | | | 80504180 |
| | | 6E0008D0 | RTSET | - | | RID | STORE ROUTINE NUMBER | | 80504190 |
| | | C60009E9 | RERUN | _ | | RTABL | GET ROUTINE AOOR AND | | 80504200 |
| | | D40D0809 | | STO | Ļ | MLSCF | SET MLSCF | | 80504210 |
| | | D400D801 | | STO | Ļ | RAD | ROUTINE ADOR | | 80504220 |
| D9E7 | 00 | 4C#0012D | | BSC | 1 | START | RETURN TO MONITOR | SX | 80504230 |
| | _ | 0000 | - | 0.0 | | /00D0 | ROUTINE TABLE | | 80504240 80504250 |
| 09E9 | - | 0000 | RTABL | DC | | RT1 | PEN UP-DOWN OCTAGON | | 80504260 |
| O9EA | _ | 0854 | | DC | | RT2 | REGISTRATION TEST | | 80504270 |
| 09E8 | _ | D868 | | OC. | | RT3 | SWING TEST | | 80504280 |
| D9EC | _ | 088C | | DC | | RT4 | WINOMILL TEST | | 80504290 |
| 09E0 | | 0937 0949 | | DC | | RT5 | MANUAL CONTROL | | 80504300 |
| OPEF | | 09CA | | DC | | RTEND | ROUTINE END | | 80504310 |
| 0761 | • | V70A | | - | | | MODIENTE LIND | | 80504320 |
| | | | • | | | | | | 80504330 |
| | | | **** | | | ROUTINE | BUSY ************* | | 80504340 |
| | | | | | | | | | 80504350 |
| | | | • | | | | | | 80504360 |
| 09F0 | 0 | 000D | BUSY | DC | | /0000 | RETURN AODR | SE | 80504370 |
| 09F1 | 01 | CCOODABE | | LDO | L | MBUSY | MSG- BUSY | | 80504380 |
| 09F3 | 0 | 4002 | | 851 | | ERR1 | USE ERROR ROUTINE | SC | 80504370 |
| 09F4 | 01 | 4C#D09FD | | BSC | 1 | 8USY | TURN TO PROGRAM | SX | 80504400 |
| | | | • | | | | | | 80504410 |
| | | | • | | | | | | 80504420 |
| | | | **** | | | ROUTINE | ERROR TYPE OUT ******* | | 80504430 |
| | | | • | | | | | | 80504440 |
| | _ | | 5000 | | | | OCTUBE ADDO | SE | 80504450 80504460 |
| 09 F 6 | D | DDOO | ERR 1 | 0C | | /0000 | RETURN ADDR | 36 | 80504470 |
| AAE 7 | ^^ | 44800130 | ERBSY | 961 | 1 | ERROR | CALL MONITOR ERROR | SC | 80504480 |
| 09F9 | | 0A06 | CKD31 | DC | • | ERMSG | MESSAGE AOOR | 30 | 80504490 |
| O9FA | _ | 09FF | | DC | | REPT1 | BUSY AODR | | 8050450D |
| 09F8 | | 09FF | | DC | | REFT1 | ERROR AODR | | 80504510 |
| ₩ 7F 0 | • | V71 F | • | 50 | | ****** | | | 80504520 |
| DOFC | DI | 658009F6 | - | LDX | 11 | ERR1 | | | BD504530 |
| DOFE | | 7002 | | MDX | •- | OUT | | | 80504540 |
| J L | _ | | | | | | | | 80504550 |
| 09FF | 01 | 650009F7 | REPTI | LDX | L1 | ERBSY | | | 8D504560 |
| | | 60000809 | OUT | STX | LI | MLSCF | SET MLSCF | | 80504570 |
| | | 4C80012D | - | 8 SC | 1 | START | RETURN TO MONITUR | SX | 80504580 |
| | | | • | | | | | | 80504590 |
| DA06 | | D000 | | BSS | E | 0 | | | 80504600 |
| DA06 | 0 | 0003 | ERMSG | OC | | /0003 | WDRO COUNT | | 80504610 |
| 0A07 | 0 | D000 | | OC. | | /0000 | HEX CONTROL | | 80504620 |
| 80A0 | | E003 | | DC | | /E003 | MESSAGE NUMBER | | 80504630 |
| 0409 | | BIEE | | 90 | | /BIEE | COOEO MESSAGE | | 80504640 |
| AOAO | | 0000 | ERBIT | | | /0000 | BITS IN ERROR | | 80504650 |
| OAOB | 0 | 0000 | 02BE | DC | | /0000 | CORRECT BITS | | 80504660 |
| | | | * | | | | | | 80504670 |
| | | | * | | | BOUT *** | OISPATCH ********* | | 805046 8 0 805046 9 0 |
| | | | ***** | | | FOOTINE | AISLAIPU AAAAAAAAAA | | 80504700 |
| | | | * | | | | | | 80504710 |
| | | | - | | | | | | |

| | 28FE866 415120 | PROG IO OB PAGE |
|--------|-------------------|--------------------|
| EC NO. | 412150 | FAUL |

| | | | | | 40000 | RSTURN ADDR | SE | 00504720 |
|---------|-----------|------------|-------|----|------------|-----------------------|----|--------------------------|
| OAOC 0 | 0000 | DISP | DC | | /0000 | | 36 | |
| 0A00 01 | 6580DA71 | NEXT | LDX | | LOOK | NESTORE XR 1 | | 80534738 |
| OAOF O | 6961 | | STX | 1 | LOOK | SAVE XR 1 | | 88584748 |
| 0A10 00 | CDEDDDOOO | | LDO | 11 | D | GET COUNT + DIRECTION | | 80504750 |
| | DCGGGA98 | | STD | 1. | COUNT | | | 80504760 |
| | | | • • • | | 0.00.00 | | | 80504770 |
| 0414 01 | 4C980ADC | • | 8SC | 1 | 01SP.+- | SCH ON ZERO | SX | 80504780 |
| | | | | | | | SC | 80504790 |
| 0A16 0 | 4021 | | BSI | | READY | CHECK STATUS | 30 | |
| 0A17 0 | D87C | PLOT | X 10 | | MARK | HOVE COMMAND | | 80504888 |
| 0A18 0 | 0877 | | XIO | | SEN.F | SENSE DSW | | 80584818 |
| DAIP D | DOF0 | | STO | | ERBIT | SAVE ERROR 81TS | | 80504820 |
| OALA O | F052 | | EOR | | K0002 | CHECK BUSY | | 80584830 |
| | 4C180A1F | | BSC | L | TIME .+- | BCH ON ZERO | | 80504840 |
| OAID O | DOEO | | STO | • | 028E | CORRECT DSW 8175 | | 80504650 |
| _ | | | | | | USE ERROR ROUTINE | SC | 80504860 |
| OALE O | 4007 | | 851 | | ERR1 | 135 SHUM HOUSE | 30 | 80504870 |
| | | | | | | | | |
| 0A1F 00 | 65000700 | TIME | FOX | | /0700 | TIMING CONSTANT | | 80504880 |
| 0A21 0 | 6948 | | STX | 1 | CONST | | | 80504890 |
| 0A22 01 | 65000A28 | HOPY | LOX | LI | HOP | GET MLSCF | | 80504900 |
| | 60000808 | | STX | | MLSCF+2 | SET MLSCF | | 80504910 |
| | 40600120 | | BSC | ī | START | RETURN TO MONITOR | SX | 80504920 |
| U-11.0 | 10000120 | | | • | 012 | | • | 80504930 |
| | 74550444 | | - | | CONST,-1 | REDUCE TIMER | SE | 80504740 |
| | 74FFOA6A | HOP | MOX | L | | REDUCE TIMER | 36 | 80504950 |
| OAZA O | 70F7 | | MOX | | HOPY | | | |
| 0A28 0 | C860 | | LDD | | MNINT | MSG- NO INTERRUPT | | 80504960 |
| OA2C O | 4023 | | BSI | | TYPE | USE TYPE ROUTINE | SC | 80504970 |
| | | | | | | | | 80504980 |
| DA20 01 | 74FF0A98 | CONT | MDX | L | COUNT1 | REDUCE COUNT | | 80504990 |
| DAZF O | 70E7 | | MDX | _ | PLOT | | | 80505080 |
| UNE! U | 1001 | | | | | | | 80505010 |
| | 7.010.71 | • | | | 1004 1 | THEREACE LOOK AW 1 | | 80505020 |
| | 74010A71 | | MOX | L | LOOK,1 | INCREASE LOOK BY 1 | | |
| 0A32 0 | 700A | | MCX | | NEXT | | | 80505030 |
| | | | | | | | | 80505040 |
| | | • | | | | | | 80505050 |
| | | **** | | | ROUTINE NO | T READY ********* | | 80505048 |
| | | • | | | | | | 80505070 |
| | | | | | | | | 80505080 |
| 0A33 0 | ODOD | NRDY | 00 | | /00DD | RETURN ADDR | SE | 80505090 |
| | | ·········· | | | MNROY | HSG- NOT READY | | 80505100 |
| 0A34 D | C855 | | F00 | | | | | 80505118 |
| 0A35 0 | 401A | | BSI | _ | TYPE | USE TYPE ROUTINE | SC | |
| 0A36 01 | 4C800A33 | | BSC | I | NRDY | RETURN TO PROGRAM | SX | 80505120 |
| | | • | | | | | | 80505130 |
| | | • | | | | | | 80505140 |
| | | **** | | | ROUTINE ST | ATUS CHECK ******* | | #050515 0 |
| | | | | | | | | 80505160 |
| | | • | | | | | | 80505170 |
| 0A38 0 | D000 | READY | DC | | /0000 | RETURN ADDR | SE | 80505180 |
| | | REAUI | | | | | | 80505190 |
| 0A39 0 | 0858 | | XIO | | SENSE | SENSE DSW AND RESET | | |
| | 4C980A38 | | BSC | 1 | READY,+- | BCH ON ZERO | SX | 80505200 |
| OA3C O | DOCO | | STO | | ERBIT | SAVE DSW | | 80505210 |
| 0A3D 01 | 4404DA33 | | 851 | L | NRDY.E | 8CH IF BIT 15 CM | SC | 8D505220 |
| OA3F O | COCA | | LD | | ERBIT | GET ERROR DSW | | 8 05052 30 |
| 0A40 0 | 1801 | | SRA | | 1 | | | 80505240 |
| | 440409F0 | | BSI | L | BUSY, E | BCH IF BIT 14 OM | SC | 80505250 |
| 0A43 0 | C0C6 | | LD | • | ERBIT | GET ERROR DSM | - | 80505260 |
| | | | | | | GET CHRON DOW | | 80505270 |
| 0A74 0 | 1802 | | SRA | | 2 | | | |
| | 442009F6 | | | L | ERR1.Z | SCH ON SITS | SC | 8D505280 |
| 0A47 D | | NOT | XIO | _ | SENSE | SENSE OSW AND RESET | | 80505290 |
| 0A48 D1 | 4C980A38 | | BSC | 1 | | RETURN TO PROG DM 0 | SX | 80505300 |
| 0A4A 01 | 65000A47 | | LOX | L1 | :10T | GET MLSCF | | 80505310 |
| | 60000309 | | STX | LI | MLSCF | SET MLSCF | | 80505320 |
| | 4C80012D | | BSC | 1 | START | RETURN TO MONITOR | SX | 80505330 |
| 2 | | | | - | | | | 80505340 |
| | | **** | | | BOUTTHE TY | PE ********** | | 80505350 |
| 4 | | | | | MUUIINE IT | | | |
| | 0000 | • | | | 40000 | 25712M 4555 | | 80505360 |
| 0A50 0 | | TYPE | | | /0000 | RETURN ADDR | SE | 80505370 |
| 0A51 0 | | | STD | | MSG | MSG AND NUMBER | | 80505380 |
| 0A52 01 | C4000#02 | | LD | L | SWO | SIT SWITCH STORAGE | | 805053 9 0 |
| | | | | | | | | |

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1627 FUNCTION TEST

C

| 0A54 D | 100C | | SLA | | 12 | | | 80505400 |
|--|--|---|--|-----|--|---|----|--|
| 0A55 01 | 4CA80A50 | | 8 SC | I | TYPE ++Z | BCH ON BIT 13 | SX | 80505410 |
| • | | • | | | | | | 80505420 |
| 0A57 00 | 448C012F | LOGAG | 8S I | 1 | LOG | CALL MONITOR LOG | SC | 80505430 |
| 0A59 1 | 0466 | | DC | | LOGM | ADDR OF MSG | | 80505440 |
| OASA 1 | 0A5F | | DC | | LOG8 | BUSY AODR | | 80505450 |
| 0.58 0 | 0000 | | DC | | /0000 | | | 80505460 80505470 |
| | | * | | | | | | 80505480 |
| | 65800A50 | | LDX | 11 | TYPE | GET MLSCF | | 80505490 |
| UASE O | 7002 | | MDX | | OUT1 | | | 80505500 |
| | | * | | | 10010 | | | 80505510 |
| | 65000A57 | LOGS | LDX | | LOGAG | | | 80505520 |
| | 40800080A | OUTI | STX | I | MLSCF+1 START | RETURN TO MONITOR | SX | 80505530 |
| 0A63 00 | 4C80012D | | 6 3 C | • | 31 461 | neronic to home on | | 80505540 |
| 0466 | 0000 | • | 855 | E | 0 | | | 80505550 |
| 0466 | 0000 | LOGM | DC | • | /0001 | WORD COUNT | | 80505560 |
| 0A66 0 0A67 0 | 0000 | LUUN | DC | | /0000 | HEX | | 80505570 |
| 0A68 0 | 0000 | MSG | DC | | /0000 | MESSAGE NUMBER | | 80505580 |
| 0A69 0 | 0000 | | DC | | /0000 | | | 80505590 |
| | | * | | | | | | 80505600 |
| | | ***** | ***** | *** | ******* | ****** | | 80505610 |
| | | * | | | | | | 80505620 |
| | | **** | | | STORAGE AR | EA ************ | | 80505630 |
| | | * | | | | | | 80505640 |
| | | | | | | | | 80505650 |
| OAGA O | 0000 | CONST | DC | | /0000 | | | 80505660 |
| 0A68 0 | 0000 | EXTRA | | | /0000 | | | 80505670 |
| DA6C D | 0000 | KODOO | | | /00D0 | ZERO CONSTANT | | 80505680 |
| OA6D O | 0002 | K0002 | | | /0002 | | | 805056 90 80505700 |
| OAGE O | 0007 | K0007 | | | /0007 | CONCTANT | | 80505710 |
| OA6F O | 0096 | K0150 | | | 150 | CONSTANT | | 80505720 |
| 0A70 0 | 8000 | K8000 | | | 0003 | START OF STRING | | 80505730 |
| 0A71 0 | 0000 | LOOK | DC | | /0000 | SQUARE COUNT | | 80505710 |
| 0A72 0 | 0000 | SQRCT | | | /0000 /0000 | TRIANGLE COUNT | | 80505750 |
| 0A73 0 | 0000 | TRICT | DC | | 70000 | TRIANGEE COOK | | 80505760 |
| | | | **** | *** | ******** | ************** | | 80505770 |
| | | * | | | | | | 80505780 |
| | | ***** | | | COMMANO AR | EA ************* | | 80505790 |
| | | * | | | | | | |
| | | | | | | | | 80505800 |
| | | * | | | | | | 80505800 80505810 |
| 0474 0 | 0000 | * NN | Di | | /0000 | MOVE COUNT | | 80505800 80505810 80505820 |
| 0A74 0 0A75 0 | 0000 4000 | - | Di. DC | | /0000 /40D0 | MOVE COUNT DIRECTION— NORTH | | 80505800 80505810 80505820 80505830 |
| | | - | | | | DIRECTION- NORTH | | 80505800 80505810 80505820 80505830 80505840 |
| 0A75 0 | 4000 | NN | DC | | /40D0 /0000 /2000 | | | 80505800 80505810 80505820 80505830 8D505840 80505850 |
| 0A75 0 0A76 0 | 4000 0000 | NN | DC DC OC DC | | /40D0 /0000 /2000 /0000 | DIRECTION- NORTH - SOUTH | | 80505800 80505810 80505820 80505830 80505840 80505850 |
| OA75 O OA76 O OA77 O OA78 O OA79 O | 4000 0000 2000 0000 1000 | NN SS EE | DC DC OC DC | | /40D0 /0000 /2000 /0000 /1000 | DIRECTION- NORTH | | 80505800 80505810 80505820 80505830 8D505840 80505850 80505860 80505870 |
| OA75 O OA76 O OA77 O OA78 O OA79 O OA7A O | 4000 0000 2000 0000 1000 0000 | NN SS | DC DC OC DC DC | | /40D0 /0000 /2000 /0000 /1000 /0000 | DIRECTION- NORTH - SOUTH - EAST | | 80505800 80505810 80505820 80505830 80505840 80505850 80505860 80505860 |
| OA75 O OA76 O OA77 O OA78 O OA79 O OA7A O OA78 O | 4000 0000 2000 0000 1000 0000 0800 | NN SS EE WW | DC OC DC DC OC | | /40D0 /0000 /2000 /0000 /1000 /0000 /0800 | DIRECTION- NORTH - SOUTH | | 80505800 80505810 80505820 80505830 80505840 80505850 80505860 80505870 80505880 |
| 0A75 0 0A76 0 0A77 0 0A78 0 0A79 0 0A7A 0 0A7B 0 0A7C 0 | 4000 0000 2000 0000 1000 0000 0800 0000 | NN SS EE | DC OC DC DC OC OC | | /40D0 /0000 /2000 /0000 /1000 /0000 /0800 /D000 | DIRECTION- NORTH - SOUTH - EAST - WEST | | 80505800 80505810 80505810 80505830 80505840 80505860 80505860 80505860 80505880 80505880 |
| 0A75 0 0A76 0 0A77 0 0A78 0 0A79 0 0A7A 0 0A7A 0 0A7C 0 0A7D 0 | 4000 0000 2000 0000 1000 0000 0800 0000 5000 | NN SS EE WW | DC OC DC DC OC DC | | /40D0 /0000 /2000 /0000 /1000 /0000 /0800 /D000 /5000 | DIRECTION- NORTH - SOUTH - EAST | | 80505800 80505810 80505830 80505830 80505850 80505860 80505870 80505870 80505890 80505990 |
| 0A75 0 0A76 0 0A77 0 0A78 0 0A79 0 0A7A 0 0A7A 0 0A7C 0 0A7C 0 0A7C 0 | 4000 0000 2000 0000 1000 0000 0800 0000 5000 0000 | NN SS EE WW | DC DC DC DC DC DC DC | | /40D0 /0000 /2000 /0000 /1000 /0000 /0000 /5000 /0000 | DIRECTION- NORTH - SOUTH - EAST - WEST - NORTHEAST | | 80505800 80505810 80505820 80505830 80505840 80505850 80505860 80505860 80505880 80505890 805059900 805059910 |
| 0A75 0 0A76 0 0A77 0 0A78 0 0A79 0 0A7A 0 0A7A 0 0A7C 0 0A7C 0 0A7C 0 | 4000 0000 2000 0000 1000 0000 0800 0000 5000 0000 3000 | NN SS EE WW NE SE | DC DC DC DC DC DC DC DC | | /4000 /0000 /2000 /0000 /1000 /0000 /0000 /5000 /0000 /3000 | DIRECTION- NORTH - SOUTH - EAST - WEST | | 80505800 80505810 80505830 80505830 80505850 80505860 80505870 80505870 80505890 80505990 |
| 0A75 0 0A76 0 0A77 0 0A78 0 0A79 0 0A7A 0 0A7A 0 0A7C 0 0A7C 0 0A7C 0 0A7D 0 0A7F 0 | 4000 0000 2000 0000 1000 0000 0800 0000 5000 0000 3000 0000 | NN SS EE WW | DC DC DC DC DC DC DC DC | | /4000 /0000 /2000 /0000 /1000 /0000 /0000 /5000 /0000 /3000 /0000 | DIRECTION- NORTH - SOUTH - EAST - WEST - NORTHEAST | | 80505800 80505810 80505820 80505830 80505840 80505850 80505860 80505870 80505880 80505890 80505910 80505910 80505910 |
| 0A75 0 0A76 0 0A77 0 0A78 0 0A79 0 0A7A 0 0A7C 0 0A7C 0 0A7C 0 0A7E 0 0A7F 0 0A80 0 0A81 0 | 4000 0000 2000 0000 1000 0000 0800 0000 5000 0000 3000 0000 2800 | NN SS EE WW NE SE SW | DC | | /4000 /0000 /2000 /0000 /1000 /0000 /0000 /5000 /0000 /3000 /2800 | DIRECTION- NORTH - SOUTH - EAST - WEST - NORTHEAST - SOUTHEAST | | 80505800 80505810 80505820 80505840 80505850 80505860 80505860 80505860 80505890 80505900 80505920 80505930 |
| OA75 O OA76 O OA77 O OA78 O OA78 O OA78 O OA78 O OA7C O OA7C O OA7C O OA7F O OA8C O OA8C O OA82 O | 4000 0000 2000 0000 1000 0000 0800 0000 5000 0000 3000 0000 2800 0000 | NN SS EE WW NE SE | DC D | | /4000 /0000 /2000 /0000 /1000 /0000 /0000 /5000 /0000 /3000 /0000 /2800 /0000 | DIRECTION- NORTH - SOUTH - EAST - WEST - NORTHEAST - SOUTHEAST | | 80505800 80505810 80505810 80505830 80505840 80505860 80505860 80505880 80505890 80505910 80505910 80505930 80505930 |
| OA75 O OA76 O OA77 O OA78 O OA78 O OA78 O OA7C O OA80 O OA80 O OA81 O OA81 O OA83 O | 4000 0000 2000 0000 1000 0000 0800 0000 5000 0000 3000 0000 2800 0000 4800 | NN SS EE WW NE SE SW | DC D | | /4000 /0000 /2000 /0000 /1000 /0000 /0000 /5000 /0000 /3000 /2800 /0000 /4800 | DIRECTION- NORTH - SOUTH - EAST - WEST - NORTHEAST - SOUTHEAST - SOUTHEAST | | 80505800 80505810 80505820 80505840 80505850 80505860 80505860 80505870 80505890 80505900 80505910 80505920 80505930 80505959595959595959595959595960 |
| OA75 O OA76 O OA77 O OA78 O OA78 O OA78 O OA7C O OA7E O OA7E O OA7E O OA7E O OA81 O OA81 O OA83 O OA83 O | 4000 0000 2000 0000 1000 0000 0800 0000 5000 0000 3000 0000 2800 0000 4800 0001 | NN SS EE WW NE SE SW | DC D | | /4000 /0000 /2000 /0000 /1000 /0000 /0000 /5000 /0000 /3000 /0000 /2800 /0000 | DIRECTION- NORTH - SOUTH - EAST - WEST - NORTHEAST - SOUTHEAST - SOUTHEAST | | 80505800 80505810 80505820 80505830 80505840 80505860 80505860 80505860 80505890 80505900 80505910 80505920 80505930 80505940 80505959 |
| 0A75 0 0A76 0 0A77 0 0A78 0 0A78 0 0A7A 0 0A7C 0 0A7C 0 0A7E 0 0A7E 0 0A8F 0 0A8F 0 0A88 0 0A88 0 0A88 0 0A88 0 | 4000 0000 2000 0000 1000 0000 0800 0000 5000 0000 3000 0000 2800 0000 4800 0001 | NN SS EE WW NE SE SW NW | DC | | /4000 /0000 /2000 /0000 /1000 /0000 /0000 /5000 /0000 /3000 /0000 /2800 /0000 /4800 /0001 | DIRECTION- NORTH - SOUTH - EAST - WEST - NORTHEAST - SOUTHEAST - SOUTHWEST - NORTHWEST - PEN UP | | 80505800 80505810 80505820 80505830 80505840 80505850 80505860 80505880 80505890 80505990 80505910 80505930 80505930 8050595960 80505970 80505970 80505970 |
| OA75 O OA76 O OA77 O OA78 O OA78 O OA78 O OA76 O OA7C O OA7C O OA7C O OA7E O OA81 O OA82 O OA83 O OA84 O OA86 O | 4000 0000 2000 0000 1000 0000 0800 0000 5000 0000 2800 0000 4800 0001 | NN SS EE WW NE SE SW | DC | | /4000 /0000 /2000 /0000 /1000 /0000 /0000 /5000 /0000 /3000 /2800 /0000 /4800 /0001 /0400 | DIRECTION- NORTH - SOUTH - EAST - WEST - NORTHEAST - SOUTHEAST - SOUTHWEST - NORTHWEST | | 80505800 80505810 80505820 80505830 80505840 80505850 80505860 80505860 8050590 8050590 80505910 80505920 80505930 8050595950 8050595950 80505960 80505990 80505990 80505990 |
| OA75 O OA76 O OA77 O OA78 O OA78 O OA78 O OA76 O OA76 O OA76 O OA76 O OA76 O OA80 O OA80 O OA81 O OA82 O OA83 O OA84 O CA65 O OA87 O | 4000 0000 2000 0000 1000 0000 0800 0000 5000 0000 3000 0000 2800 0000 4800 0001 | NN SS EE WW NE SE SW NW | DC 000 000 000 000 000 000 000 000 000 0 | | /4000 /0000 /2000 /0000 /1000 /0000 /0000 /5000 /0000 /3000 /0000 /2800 /0000 /4800 /0001 /0001 | DIRECTION- NORTH - SOUTH - EAST - WEST - NORTHEAST - SOUTHEAST - SOUTHWEST - NORTHWEST - PEN UP - PEN DOWN | | 80505800 80505810 80505820 80505840 80505840 80505850 80505860 80505880 80505980 80505910 80505910 80505920 80505930 805059595 805059595 805059595 805059595 |
| OA75 O OA76 O OA77 O OA78 O OA78 O OA78 O OA76 O OA7C O OA7C O OA7C O OA7E O OA81 O OA82 O OA83 O OA84 O OA86 O | 4000 0000 2000 0000 1000 0000 0800 0000 5000 0000 2800 0000 4800 0001 0400 0001 | NN SS EE HM NE SE SM NW PENUP | | | /4000 /0000 /2000 /0000 /1000 /0000 /0000 /5000 /0000 /3000 /2800 /0000 /4800 /0001 /0001 /8000 | DIRECTION- NORTH - SOUTH - EAST - WEST - NORTHEAST - SOUTHEAST - SOUTHWEST - NORTHWEST - PEN UP | | 80505800 80505810 80505820 80505840 80505850 80505860 80505860 80505870 80505890 80505900 80505910 80505940 80505950 80505950 80505950 80505950 80505960 |
| OA75 O OA76 O OA77 O OA78 O OA78 O OA78 O OA7C O OA7C O OA7C O OA7C O OA7E O OA7E O OA81 O OA81 O OA81 O OA81 O OA81 O OA81 O OA83 O OA83 O OA84 O CA65 O OA86 O OA86 O OA88 O | 4000 0000 2000 0000 1000 0000 0800 0000 5000 0000 2800 0000 2800 0000 4800 0001 0400 0044C | NN SS EE WW NE SE SW NW PENUP PENOW LEFT | DC | | /40D0 /0000 /2000 /0000 /1000 /0000 /0000 /5000 /0000 /30C0 /0000 /2800 /0000 /4800 /0001 /6000 /0001 /8D00 1100 /0800 | DIRECTION- NORTH - SOUTH - EAST - WEST - NORTHEAST - SOUTHEAST - SOUTHWEST - NORTHWEST - PEN UP - PEN DOWN | | 80505800 80505810 80505820 80505830 80505840 80505850 80505860 80505880 80505880 80505890 80505910 80505910 80505930 80505930 80505970 80505970 80505970 80505970 80505970 80506000 80506010 80506010 |
| OA75 O OA76 O OA77 O OA78 O OA78 O OA78 O OA7C O OA7C O OA7C O OA7C O OA7E O OA7E O OA81 O OA81 O OA81 O OA81 O OA81 O OA81 O OA83 O OA83 O OA84 O CA65 O OA86 O OA86 O OA88 O | 4000 0000 2000 0000 1000 0000 0800 0000 5000 0000 2800 0000 2800 0000 4800 0001 0400 0044C | NN SS EE WW NE SE SW NW PENUP PENOW LEFT | DC | | /4000 /0000 /2000 /0000 /1000 /0000 /0000 /5000 /0000 /3000 /2800 /0000 /4800 /0001 /6000 /6000 /6000 /6000 /6000 /6000 | DIRECTION- NORTH - SOUTH - EAST - WEST - NORTHEAST - SOUTHEAST - SOUTHWEST - NORTHWEST - PEN UP - PEN DOWN - WEST | | 80505800 80505810 80505820 80505830 80505840 80505850 80505860 80505880 80505890 80505990 80505910 80505920 80505930 805059590 805059590 805059590 80505990 80505990 80506000 |
| OA75 O OA76 O OA77 O OA78 O OA78 O OA78 O OA78 O OA76 O OA76 O OA76 O OA76 O OA81 O OA82 O OA83 O OA85 O OA85 O OA86 O OA87 O OA88 O OA88 O OA88 O | 4000 0000 2000 0000 1000 0000 0800 0000 5000 0000 2800 0000 4800 0001 0400 0001 8000 044C 0800 | NN SS EE HW NE SE SW NW PENUP PENOW LEFT #MNRDY | DC | | /40D0 /0000 /2000 /0000 /1000 /0000 /0000 /5000 /0000 /30C0 /0000 /2800 /0000 /4800 /0001 /6000 /0001 /8D00 1100 /0800 | DIRECTION- NORTH - SOUTH - EAST - WEST - NORTHEAST - SOUTHEAST - SOUTHWEST - NORTHWEST - PEN UP - PEN DOWN | | 80505800 80505810 80505820 80505840 80505850 80505850 80505860 80505880 80505980 80505990 80505990 80505990 8050595950 8050595950 80505950 80505950 80505950 80505950 80505950 80505950 80506000 80506000 80506040 80506040 |
| OA75 O OA76 O OA77 O OA78 O OA78 O OA78 O OA78 O OA76 O OA76 O OA76 O OA76 O OA80 O OA80 O OA81 O OA82 O OA83 O OA84 O OA86 O OA86 O OA87 O OA88 O OA88 O OA88 O | 4000 0000 2000 0000 1000 0000 0000 5000 0000 2800 0000 4800 0001 0400 0001 8000 044C 0800 | NN SS EE WW NE SE SW NW PENUP PENOW LEFT | DC | | /4000 /0000 /2000 /0000 /1000 /0000 /0000 /5000 /0000 /3000 /2800 /0000 /4800 /0001 /6000 /6000 /6000 /6000 /6000 /6000 | DIRECTION- NORTH - SOUTH - EAST - WEST - NORTHEAST - SOUTHEAST - SOUTHWEST - NORTHWEST - PEN UP - PEN DOWN - WEST | | 80505800 80505810 80505820 80505830 80505840 80505850 80505860 80505880 80505890 80505990 80505910 80505920 80505930 805059590 805059590 805059590 80505990 80505990 80506000 |

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1627 FUNCTION TEST

| O DBAO | E001 | MNINT DC | /E001 | | 80506080 |
|------------------|--------------|------------|--------------|----------------------|-------------------------------|
| 0.880 O | 1CED | DC DC | /1CEO | MSG- NO INTERRUPT | 80506090 |
| DABE O | E002 | MBUSY DC | /E002 | | 80506100 |
| DASF O | ADOO | DC | /A000 | MSG- BUSY | 80506110 |
| U | | | | | 80506120 |
| 0 09A0 | 0000 | SENT DC | /0000 | SENSE OSW | 80506130 |
| 0A91 0 | 0700 | DC | /0700 | | 80506140 |
| 0A92 0 | 0000 | SENSE DC | /0000 | SENSE OSH + RESET | 80506150 |
| 0A93 0 | 0701 | DC | /0701 | | 80506160 |
| 0A94 1 | 0A99 | HARK DC | COMAD | DIRECTION COMMAND | 80506170 |
| 0A95 0 | 0100 | DC | /0100 | | 80506180 |
| | | • | | | 80506190 |
| 0A96 0 | 1100 | BSWCT DC | /1100 | CHD EXECUTE CHTR | 80506200 |
| 0A97 0 | 0000 | SBSW2 DC | /0000 | MANUAL COMMAND STE | 80506210 |
| 0 8 PAG | 0000 | COUNT OC | /0000 | | 80506220 |
| 0A99 0 | 0000 | COMAD DC | /0000 | | 80506230 |
| | | | | | 80506240 |
| OA9A 1 | 0A84 | RTIST DC | PENUP | RT 1 START | 805062 5 0 80506260 |
| 0A98 l | OASS | OC | LEFT | | 80506270 |
| DA9C 1 | 0470 | DC | NE | CTART LCT OCTACON | 80506270 |
| DA9D 1 | 0A86 | DC | PENDW | START 1ST OCTAGON | 80506290 |
| DASE 1 | 0A74 | DC | NN OF NUE | 1ST SIOE | 80506300 |
| OA9F 1 | 0A84 | DC | PENUP | | 80506310 |
| DAAD 1 | 0A78 | DC DC | EE | | 80506320 |
| OAA1 1 | OA7C | DC | NE | | 80506330 |
| DAA2 1 | 0A86 | DC DC | PENDW Se | 2ND SIDE | 80506340 |
| OAA3 1 | OA7E | DC | PENUP | ZND SIDE | 80506350 |
| OAA4 1 | 0A84 | DC | SW | | 80506360 |
| 0AA5 1 | 0A80 0A76 | DC | SS | | 80506370 |
| DAA6 1 | | 00 | PENDW | | 80506380 |
| DAA7 1 | OA86 OA7A | DC | AM | 3RO SIDE | 80506390 |
| OAA8 1 OAA9 1 | UA84 | DC | PENUP | | 80506400 |
| OAAA 1 | 0A74 | DC | NN | | 80506410 |
| DAAS 1 | OA82 | DC | NW | | 80506420 |
| OAAC 1 | 0A86 | DČ | PENDW | | 80506430 |
| OAAO 1 | OA7C | DC | NE | 4TH SIDE | 80506440 |
| DAAE 1 | 0A84 | DC | PENUP | | 80506450 |
| DAAF 1 | OA7E | DC | SE | | 80506460 |
| 0A80 1 | 0A78 | DC | EE | | 80506470 |
| 0A81 1 | OA86 | 0 C | PENDW | | 80506480 |
| 0A82 1 | 0A76 | DC | SS | 5TH SIDE | 80506490 |
| DAES 1 | 0A84 | DC | PENUP | | 80506500 |
| 0A84 1 | OATA | DC | WW | | 80506510 |
| 0A85 1 | OABO | OC | SW | | 80506520 |
| 0A86 1 | 0A86 | DC | PENDW | | 80506530 |
| 0A87 1 | 0882 | DC | NW | 6TH SIDE | 80506540 |
| 0A88 1 | CA84 | DC | PENUP | | 80506550 |
| 0A#9 1 | DATC | DC | NE | | 80506560 |
| I ABAO | 0A74 | DC | NN | | 80506570 |
| 0A88 1 | 0A86 | DC | PENON | 2011 0105 | 80506580 |
| OABC 1 | 0A78 | DC | EE | 7TH SIDE | 80506590 |
| DABD 1 | 0A84 | 0 C | PENUP | | 80506600 |
| OABE 1 | 0A76 | DC | SS | | 80506610 80506620 |
| OASF 1 | OA7E | OC | SE | | 80506630 |
| OACO 1 | 0A86 | 00 | PENDW | ATH CIME | 80506640 |
| OAC1 1 | 0880 | DC | SW | STH SIDE | 80506650 |
| OAC2 1 | 0A84 | DC 1 | PENUP | | 80506660 |
| OAC3 1 | | DC DC | FE | | 80506670 |
| OAC4 1 | 0A78 | DC | PENDW | START SECOND OCTAGON | 80506680 |
| OACS 1 | 0A86 0A78 | DC | EE | 1ST SIDE | 80506690 |
| OAC6 1 | 0A76 | DC DC | PENUP | -01 0.00 | 80506700 |
| OAC7 1 OAC8 1 | 0A74 | DC | NN | | 80506710 |
| OAC9 1 | DATE | DC | NE | | 80506720 |
| OACA 1 | 0A86 | DC | PENDW | | 80506730 |
| | | OC OC | NK | 2ND S1DE | 80506740 |
| CACS 1 | OABZ | | | | |

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|------------------|--------------|---------------|---------------------|-------------------------------------|------------------------------|
| 1627 FU | NCTION TEST | | | | |
| | | | | | 80506760 |
| OACD 1 OACE 1 | 0A80 | DC DC | SH | | 80506770 |
| OACE 1 OACF 1 | OATA DAS6 | DC | PENDU | | 80506780 |
| 0A00 1 | 0A76 | οC | SS | 3RO S10E | 80506790 |
| OAD1 1 | OA84 | DC | PENUP | | 80506800 |
| 0AD2 1 | 0A78 | DC | EE | | 80506810 |
| OAD3 1 | OA7E | DC | SE | | 80506820 80506830 |
| 0AD4 1 | 0A86 | DC | PENDW | 474 6765 | 80506840 |
| 0AD5 1 | OA7C | DC | NE PENUP | 4TH SIOE | 80506850 |
| 0AD6 1 0A07 1 | 0A84 0A82 | DC DC | NH | | 80506860 |
| 0A08 1 | 0A74 | DC | NN | | 80506870 |
| OAD9 1 | OA86 | DC | PENOW | | 80506880 |
| OADA 1 | OA7A | DC | WW | 5TH SIOE | 80506890 |
| OADS 1 | 0A84 | DC | PENUP | | 80506900 |
| OAOC 1 | 9A76 | DC | SS | | 80506910 |
| OADO L | OABO | OC | SM | | 80506920 |
| OADE 1 | CA86 | DC | PENON | ATH SINE | 80506930 80506940 |
| OADF 1 | OA7E | DC DC | SE PENU P | 6TH SIDE | 80506950 |
| OAEO 1 | 0A84 | DC | NE | | 80506960 |
| OAE1 1 OAE2 1 | OATC OATB | DC | EE | | 80506970 |
| OAE3 1 | 0A86 | DC | PENOV | | 80506980 |
| OAE4 1 | 0A74 | DC | NN | 7TH SIOE | 80506990 |
| OAES 1 | 0A84 | DC | PENUP | | 80507000 |
| OAE6 1 | OA7A | DC. | MM | | 80507010 |
| OAE7 1 | OABZ | DC | NW | | 80507020 |
| OAEB 1 | 0A86 | OC | PENDM | 274 6106 | 80507030 80507040 |
| OAE9 1 | OABO | OC | SH | BTH SIDE | 80507050 |
| DAEA 1 | 0A84 | DC OC | PENUP KOOOO | END OF ROUTINE | 80507060 |
| OAEB 1 | OA6C | * | KOOOO | END OF HOUTINE | 80507070 |
| OAEC 1 | 0A84 | RT2ST DC | PENUP | RT 2 START | 80507080 |
| OAEO 1 | OABB | DC | LEFT | | 80507090 |
| OAEE 1 | OA7C | DC | NE | | 80507100 |
| OAEF 1 | 0A74 | DC | NN | | 80507110 |
| OAFO 1 | OATA | OC. | MM | DOOR OF THE PARTY | 80507120 80507130 |
| OAF1 1 | OAGC | DC | K0000 | RETURN CNTL TO PRDG Start Figure | 80507140 |
| OAF2 1 | OAB6 | DC DC | PENOW EE | START FIGURE | 80507150 |
| 0AF3 1 0AF4 1 | 0A78 0A82 | DC | NW | | 80507160 |
| 0AF5 1 | OABO - | DC | SH | | 80507170 |
| OAF6 1 | OAGC | DC | K0000 | RETURN CNTL TO PROG | 80507180 |
| 0AF7 1 | 0A74 | DC | NN | | 80507190 |
| OAFB 1 | OA7E | DC | SE | | 80507200 |
| OAF9 1 | OA7C | DC | NE | RETURN CNTL TO PROG | 80507210 80507220 |
| OAFA 1 | OA6C | DC | K0000 | RETURN CHIL TO PROG | 80507230 |
| OAFB 1 | 0A76 | DC DC | SS PENUP | | 80507240 |
| OAFC 1 | 0A84 | DC | MM | | 80507250 |
| OAFD 1 OAFE 1 | OA7A OA86 | DC | PENON | | 80507260 |
| OAFF 1 | 0A74 | DC | NN | | 80507270 |
| 0800 1 | OA84 | OC | PENUP | • | 80507280 |
| 0801 1 | OA7A | DC | MM | | 80507290 |
| 0802 1 | 0A86 | OC | PENDW | | 80507300 |
| 0B03 1 | OA6C | oc | K0000 | RETUNR CNTL TO PROG | 80507310 80507320 |
| OB04 1 | 0A78 | DC | EE | | 80507330 |
| 0805 1 | 0A84 | DC OC | PENUP | | 80507340 |
| 0806 1 | 0A76 | DC DC | SS PEND# | • | 80507350 |
| 0807 1 0808 1 | 0A86 0A7A | DC | WW | | 80507360 |
| 0809 1 | OAB4 | DC | PENUP | | 80507370 |
| OBOA 1 | 0A6C | DC | K0000 | ENO OF ROUTINE | 80507380 |
| | J | • | | | 80507390 |
| 0808 1 | 0A84 | RT3ST DC | PENUP | RT 3 START | 80507400 |
| OBOC 1 | BBAO | DC | LEFT | | 8050741 <i>0</i> 80507420 |
| 0800 1 | 0A78 | DC | EE | | 80507420 |
| JBOE 1 | 0A74 | DC | NN | | 90701 73V |
| | | | | | |
| DATE | 28FE866 | | | | PROG 10 0805-0 |
| EC ND. | 415120 | | | | |

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| 080F 1 | OAGC | DC | коооо | . STURN CHTL TO PROG | 80507448 |
|------------------|--------------|----------|-------------|-----------------------|--------------------------------------|
| 0810 1 | OAS6 | DC | PENDH | START SQUARE | 80507450 |
| 0811 1 | 0A74 | DC | NA | | 80507460 |
| 0812 1 | 0A78 | DC | EE | | 80507470 |
| 0813 1 | 0A76 | DC | SS | | 80507480 |
| 0814 1 | OAGC | DC | K0000 | RETURN CHTE TO PROG | 80507490 |
| 0815 1 | OA7A | DC | WW | | 80507500 |
| 0816 1 | OAGC | DC | K0000 | RETURN CHTL TO PROG | 80507510 |
| 0817 1 | 0A84 | DC | PENUP | | 8050752 0 |
| OB18 1 | OATC | DC | NE | | 8050 7530 8050 7540 |
| 0819 1 | OAGC | DC | K 0000 | RETURN CATL TO PROG | 40507550 |
| OBIA 1 | 0A86 | DC | PENDW | | 8050 7560 |
| 0818 1 | OA7E | DC | SE | | 80507570 |
| OBIC 1 | OA84 | DC | PENUP | | 405075 60 |
| 081D 1 | 0A74 | DC | NA | | 8050 7590 |
| OBIE 1 | OAB6 | DC | PENDW | | 80507600 |
| 081F 1 | OABO | OC | SW K0000 | RETURN CHTL TO PROG | 60507610 |
| 0820 1 | OA6C | OC | NH | KEIDKA CALL ID TAGE | 80507620 |
| 0821 1 | OABZ | DC | K0000 | RETURN CHTL TO PROG | 80507630 |
| OB22 1 | OAGC | GC BC | PENUP | KEIDAN CHIE IO INGO | 80507640 |
| 0823 1 | 0A84 | DC | SS | | 80507650 |
| 0B24 1 | 0A76 | DC DC | PENDN | | 80507660 |
| 0825 1 | 0A86 | DC | NE | | 80507670 |
| 0826 1 0827 1 | OA7C OA6C | OC. | K0000 | END OF ROUTINE | 80507680 |
| 0821 1 | DAGE | • | | | 80507690 |
| 0828 1 | OAB4 | RT4ST DC | PENUP | RT4 START | 805077 00 |
| 0829 1 | DASS | DC | LEFT | | 80507710 |
| OBZA 1 | OATC | DC | NE | | 80507720 |
| 082B 1 | 0A74 | DC | NN | | 80507730 |
| OBZC 1 | 0A74 | DC | NN | | 80567740 |
| 0820 1 | OAGC | oc. | K0000 | RETURN CNTL TO PROG | 80507750 |
| OBZE 1 | QA86 | DC | PENDW | | 80507760 |
| 082F 1 | OABO | DC | SH | SIOE 1 TRI 1 | 80507770 |
| 0830 1 | OAB2 | DC | NW | | 80507780 |
| OB31 1 | DAGC | OC | K0000 | RETURN CHTL TO PROG | 80507790 |
| OB32 1 | OABZ | DC | NW | SIDE 2 TR1 1 | 80507800 |
| 0833 1 | OATC | OC | NE | | 80507810 80507820 |
| OB34 1 | OA6C | DC | K0000 | RETURN CNTL TO PRDG | 8050 7830 |
| 0835 1 | 0A74 | DC | NN | S10E 3 TR1 1 | 80507840 |
| OB36 1 | OA7E | DC | SE | | 80507850 |
| 0837 1 | OA7E | DC | SE | RETURN CNTL TO PRDG | 80507860 |
| 0838 1 | OAAC | DC | K0000 | MOVE TO NEW LOCATION | 80507870 |
| 0839 1 | 0A84 | DC DC | PENUP | HOVE TO HEW EDUCATION | 80507880 |
| OB3A 1 | OA7C | 00 | K0000 | RETURN CNTL TO PROG | 80507890 |
| 0638 1 083C 1 | OA6C OA86 | DC DC | PENOW | RETORIT SITTE TO THE | 80507900 |
| | 0A82 | OC OC | NW | SIDE 1 TRI 2 | 80507910 |
| 0830 1 083E 1 | DATC | DC | NE | | 80507920 |
| 083F 1 | DAGE | DC | K0000 | RETURN CATL TO PROG | 80507938 |
| 0840 1 | OATC | DC | NE | SIDE 2 TRI 2 | 80507940 |
| 0841 1 | OATE | DC | SE | | 80507950 |
| 0842 1 | OAGC | DC | K0000 | RETURN CNTL TO PROG | 80507960 |
| 0843 1 | OA78 | DC | EE | SIOE 3 TR1 2 | 80507970 |
| 0B44 1 | OABO | DC | SW | | 80507980 |
| 0845 1 | OABO | DC | SW | | 80507990 |
| 0846 1 | OAGC | OC | K0000 | RETURN CHTL TO PROG | 80508000 |
| 0847 1 | OA84 | DC | PENUP | MOVE TO NEW LOCATION | 80508010 |
| 0848 1 | OA7E | DC | SE | | 80508020 |
| 0849 1 | OAGC | DC | K0000 | RETURN CHTL TO PROG | 80508030 |
| 084A 1 | 0A 86 | DC | PENON | | 8050 8040 80508050 |
| 0848 1 | OA7C | OC . | NE | SIDE 1 TRI 3 | 80508060 |
| 084C 1 | OATE | OC | SE | ACTUAL CATE TO BERC | 80508070 |
| 084D 1 | OAGC | OC | K0000 | RETURN CNTL TO PROG | 805080 80 |
| OB4E 1 | OA7E | OC | SE | S10E 2 TR1 3 | 80508090 |
| UB4F 1 | OBAO | DC | 2 M | RETURN CHTL TO PROG | 80508100 |
| 0850 1 | OAGC | DC DC | K0000 SS | SIDE 3 TRI 3 | 80508110 |
| 0851 1 | 0A76 | <i></i> | 33 | 3000 3 Inc 3 | |

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18M MAINTENANCE OLAGNOSTIC PROGRAM FOR THE 1800 SYSTEM PART NO. 2196362 PAGE 1627 FUNCTION TEST 0852 1 DAS2 NH 80508120 0853 1 0A82 80508130 NH 0854 1 DAGC K 0000 RETURN CNTL TO PROG 80508140 0855 1 DAB4 PENUP MOVE TO NEW LOCATION 80508150 0856 1 DABO 80508160 0857 1 UA6C K 0000 RETURN CNTL TO PROG 80508170 0858 1 0A86 PENON 80508180 STOE 1 TRI 4 0859 1 OA7E SE 80508190 085A 1 DABO SW 80508200 0858 1 OA6C K0000 RETURN CNTL TO PROG 80508210 085C 1 OABO SW SIGE 2 TRI 4 80508220 0850 1 0A82 80508230 085E 1 OAGC K0000 RETURN CNTL TO PROG 80508240 085F 1 0A7A S10E 3 TR1 4 80508250 0C 0C 0C 0C 0C 0C 0C 0C 0C 0860 1 OA7C NE 80508260 0861 1 9A7C 80508270 0862 1 OA6C K0000 RETURN CNTL TO PROG 80508280 0863 1 CA84 PENUP MOVE TO NEW LOCATION 80508290 0864 1 0A82 80508300 NW 0865 1 0A6C K0000 RETURN CNTL TO PROG 80508310 0866 1 0486 PENOW ORAW SQUARE 80508320 0867 1 80508330 0868 1 0ATE SE 80508340 0869 1 64.80 SW 80508350 086A 1 0513 80508360 0868 1 PENUP 0A. 4 80508370 OC. 086C 1 0A6C ENO OF ROUTINE K0000 80508380 80508390 0860 1 0A96 DC RT5ST 8 SWCT RT 5 START 80508400 086E 1 K0000 MANUAL CONTROL OA6C OC 80508410 80508420 0870 0000 8SS E 80508430 0870 ORG P10+/03FE 80508440 80503450 THIS AREA CAN BE USED FOR PATCH 80508460

18M MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM

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1627 FUNCTION TEST

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CROSS REFERENCE LISTING
8 EG1N
        012C
                   07FF.0824
800T
        0859
        0903
                   084E, 0863, 0887, 0932, 0968, 0982, 09C9, 09D6
BSWCK
BSWCT
        0A96
BUILO
        083C
                   0843
                   09F4,0A41
BUSY
        09F0
        0995
CHG1
                   0960
                   096E
        09A4
                   096F
COMAG
        0A99
                   0A94
CONST
        OA6A
                   0A21,0A28
        0A20
                   081F,09C5
COUNT
        0A98
                   0412:0A20
                   0861,085,0880,0899,08A5,0885,08C5,08EF,0908,0917,
OISP
                   0926,0943,0966,0976,0982,098E,09A2,09C3,0A14
EOIT
        0815
                   082A, 0834, 0838, 09CF
ED1T1
        0813
                   0831
EOIT2
        0814
EE
        0A78
                   087A,0888,08C8,08E3,0900,0902,0AA0,0AB0,0ABC,0AC3,
                   0AC4, 0AC6, 0A02, 0AE2, 0AF3, 0804, 0800, 0812, 0843
END
        012E
                   07FF,09CA
        0808
ER81T
        OAOA
                   0810,0A19,0A3C,0A3F,0A43
ER8SY
        09F7
ERMSG
        0A06
                   09F9
ERROR
                   07FF,09F7
        0130
EKR 1
                   09F3,09FC,0A1E,0A45
                   0883,0891.0897,0890,08A1,08A9,08E0,08F3,0924,092A,
EXTRA
        0A68
                   0974,097A,0980,0986,098C,0992
        0133
        0A28
                   0A22
HOPY
                   DAZA
        0A22
        0806
KEEP1
        081A
        OBFF
KEEP2
KEEP3
        0904
KEEP4
        0907
K0000
                   OAE8, OAF1, OAF6, OAFA, 0803, 080A, 080F, 0814, 0816, 0819.
        OA6C
                   0820,0822,0827,0820,0831,0834,0838,0838,083F,3842,
                  0846,0849,0840,0850,0854,0857,0858,085E,0862,0865,
                  086C, 086E
K0002
        0A60
                  0948,0A1A
K0007
        OA6E
                   0908
K0150
        0A6F
                  0856
K0701
        0853
                  083E
K8000
        DATO
                  0818
LABEL
        0835
LEFT
                  0A98, 0AE0, 080C, 0829
        0 A 8 8
                  07FF,0A57
LOG
        012F
LOGAG
        0A57
                  0A5F
L CG 8
        OA5F
                  OA5A
LOGM
        0A66
LOOK
        0A71
                  085F,0880,0887,088F,0894,089B,08A3,08A7,08AC,08CC,
                  08D0,08F1,08F6,090A,090F,0919,0928,0920,0941,0945,
                  0964,0978,0970,0984,0989,0990,0997,099E,09A6,09AB,
                  0A00,0A0F,0A30
LPA
        0807
MARK
        0A94
MBUSY
        OABE
MLSCF
        0809
                  0821,0846,0848,0985,09E3,0A01,0A24,0A4C,0A61
MNINT
        OABC
                  OA28
MNRDY
        ABAO
MSG
        0A68
NBTWO
        0833
        OA7C
                  0874,08C5,0921,0938,094E,095E,0995,099C,09A4,0A9C.
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1627 FUNCTION TEST

```
OAA1, OAA0, OA89, OAC9, OAO5, OAE1, OAEE, OAF9, O818, O825,
                  082A,0333,083A,083E,0840,084B,0860,0861,0867
NEXT
        OAOO
                  0A32
                  0859,0870,08C2,08E1,08FB,08FD,0913,093D,094A,0A9E,
        0A74
                  OAAA, OABA, OACB, OAOB, OAE4, OAEF, OAF7, OAFF, OBOE, OB11,
                  0810,0828,082C,0835
        0A47
NDT
                  OA4A
NROY
        0A33
                  0A36,0A3D
                  086C,0804,091F,0957,095C,0AAB,0AB7,0ACB,0AD7,0AE7,
        0 A 8 2
                  OAF4,0821,0830,0832,0830,0852,0853,085D,0864,086A
        0A01
DUT
                  09FE
                  0A5E
DUT 1
        0461
D2BE
        OAOB
                  OAID
        OBFO
                  0800
PENO
        0A86
                  OA90. UAA2. DAA7. DAAC. DAB1. DAB6. DABB. DACO. DAC5. DACA.
PENDW
                  OACF, OAD4, OAD9, OADE, OAE3, OAE8, OAF2, OAFE, OBO2, 0807,
                  0810,081A,081E,0825,082E,083C,084A,0858,0866
                  OA9A, OA9F, OAA4, OAA9, OAAE, OAB3, OABB, OABD, OAC2, OAC7,
       0A84
PENUP
                  OACC, OAD1, DAD6, OAO8, OAEO, OAE5, OAEA, OAEC, OAFC, OBOO,
                  0805,0809,0808,0817,0810,0823,0828,0839,0847,0855,
                  0863,0868
PIO
        07FF
                  0826,0870
PLBGN
        0824
                  OBFE
PLOVA
       0816
                  0839, C83F
        0A17
                  0A2F
PLDT
        0801
                  09E5
RAD
READY
       0A38
                  0854,0868,088C,C937,0A16,0A3A,0A48
       0817
                  0842,0827
RECEV
                  0988,0907
RECSW
        081F
       0880
                  0893
REG01
REG02
        0899
                  089F
        08A5
REG03
                  OBAB
        0132
                  07FF,09CD
RELOV
       09FF
                  09FA,09FB
REPT1
                  07FF, 0835
        0131
RECOV
       09E1
                  09DE
REKUN
                  090A, 09DC, 09DF
        0800
RIO
RTABL
       09E9
                  09E1
RTENO
        09CA
                  09EF
                  0808,0828,0901
RTDVR
        0966
                  0851,0866,08BA,0935,096A
RTSET
        090F
        0829
                  0806,0807,0847
RTO
RT1
        0854
                  09EA
RTIST
       OA9A
                  0850
        0868
                  09EB
RT2
RT2ST
        OAEC
                  087E
RT3
        088C
                  09EC
RT3ST
                  OBCA
       0808
                  09ED
RT4
        0937
RT4ST
                  093F
        0828
RT5
        09A9
                  0983,09EE
RT5A
        0989
                  0981,0989
RTSST
        086D
                  09A9
                  09A8
        0973
RUN
                  0844
RUNIT
        084E
SBSW2
SE
        0A97
                  0901
                  0876,0806,0951,0960,0AA3,0AAF,0ABF,0A03,0A0F,0AF8,
        OA7E
                  0816,0836,0837,0841,0848,084C,084E,0859,0868
        0A92
                  0818,0A39,0A47
CENSE
SENT
        0A90
                  083C,0840,0A18
$10E1
        0976
                  097C
                  0988
$10E2
        0982
                  0994
        098E
S10E3
                  08E6,090C
SQRCT
        0A72
SS
                  0872,08AF,0808,0915,0AA6,0A82,0A8E,0A00,0A0C,0AFB,
        0A76
                   U806,0E13,0B24,0B51
                  07FF,084C,0987,09E7,0A03,0A26,0A4E,0A63
START
        0120
       0849
STOBY
```

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1627 FUNCTION TEST

| SH | 0880 | 086E,08DB,0954,0962,0AA5,05,GAC1,0AC0,DADD,DAE9, 0AF5,0B1F,082F,0B44,0B45,0B4F,0B56,0B5A,0B5C,0B69 |
|--------|------|---|
| SWNG1 | 08E8 | 090E |
| | | D8BF.08FA.0905 |
| SHNGZ | 08E8 | |
| S WNG3 | 08EF | 08F5 |
| SWNG4 | 0926 | 092C |
| SHNG5 | 0923 | 0931 |
| SWO | 0802 | 0A52 |
| SW1 | 0803 | 0904 |
| SWZ | 0804 | 0820,09AD,09BD |
| SW3 | 0805 | |
| TCNTL | 0960 | 0950,0953,0956,0959, 09A 0 |
| TERM | 080C | 083A,09DD |
| TIME | OAIF | OA1B |
| TOP | 09A2 | 0998 |
| TRICT | 0A73 | 08E9,08F8,091C,092F,09 71,0999 |
| TYPE | 0A50 | 0A2C,0A35,0A55,0A5C |
| WM1L1 | 094A | 094D |
| WW | OATA | OBTC, OBB3, OBOD, OAAB, OAB4, OACE, OADA, OAE6, OAFD, OAFD, |
| | | 0801,0808,0815,085F |
| xx | 0834 | 0832 |

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IOM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 180D SYSTEM PART NO. 2196368 PAGE 1053/1816 FUNCTION TEST 0 TABLE OF CONTENTS () PARAGRAPH PAGE $\dot{\odot}$ I LOADING PROCEDURE 3 1 SELECTING PROGRAM OPTIONS PROGRAM HALTS 3.3 PROGRAM TERMINATION THE PRINTER TEST. THE KEYBOARD TEST ROUTINE 12 OPTION EDIT PROCEDURE Э 1. PURPOSE THE 1053-1816 TEST IS DESIGNED TO CHECK THE DPERATING PERFORMANCE OF ALL PRINTERS ON THE SYSTEM IN OVERLAP MODE. UP TO 8 PRINTERS AND ONE KEYODARD MAY BE RUN INDEPENDENTLY. 2. PREREQUISITES PROGRAM PREREQUISITES THIS PROGRAM MUST RUN UNDER CONTROL OF THE DIAGNOSTIC MONITOR. THE DIAGNOSTIC MONITRO PROGRAM USES 2,047 STURAGE WORDS, AND THIS PROGRAM USES 1,792 STORAGE WORDS. 3. OPERATING PROCEDURE PROGRAM LOADING STANDARD LOADING PROCEDURE AS DESCRIBED IN THE DIAGNOSTIC MONITOR USE PROCEDURE. 3 - 1 I

```
IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM
1053/1816 FUNCTION TEST
          3.2
                PROGRAM OPERATION
                STANDARD MONITOR OPERATING PROCEDURES APPLY.
                THESE PROCEDURES ARE SUMMARIZED HERE. SEE DM USE PROCEDURE FOR
                1. CLEAR SOTRAGE
                   LOAD DIAGNOSTIC MONITOR
                3. SELECT MODE OF EXECUTION
                  SELECT MONITOR CONTROL OPTIONS, IF DESIRED
               5. SELECT PROGRAM DPTIONS, IF DESIRED, FROM-
                   TABLE O FUNCTION SELECTION
                   TABLE 1 ROUTINE SELECT FUNCTION
                   TABLE 2 DEVICE SELECT FUNCTION
                   TABLE 3 DATA ENTRY FUNCTION
                   SET A TAB STOP 30 POSITIONS TO THE RIGHT OF THE LEFT MARGIN.
               6. INSTRUCT MONITOR TO EXECUTE
                              TABLE D FUNCTION SELECTION
      ******* 1. SET FUNCTION O1 IN SENSE/PROGRAM SWITCHES 0 AND 1.
      * SENSE/PROGRAM * 2. SET PIO IN SENSE/PROGRAM SWITCHES 2 THROUGH 7. * 0 1 2 3 4 5 6 7 * 3. SET DESIRED FUNCTION IN DATA ENTRY SWITCHES D THRU 15.
                    * 4. PRESS CONSOLE INTERRUPT
      *****************************
              DATA ENTRY SWITCHES
      * 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 * DESCRIPTION
     * 1..... USE DELAY TO LATCH THE CYCLE CLUTCH *
     ***********************
                       TABLE 1 ROUTINE SELECT FUNCTION
     * 4. PRESS CONSDLE INTERRUPT.
     ************************************
               DATA ENTRY SWITCHES
                                      * DESCRIPTION
     * 0 1 2 3 4 5 6 7 8 9 1D 11 12 13 14 15 *
                                  O O ... FRINT LAST KEYBOARD ENTRY
                                                                 RTN 1
                             D 0 1 D....TAB AND CAPRIER RETURN
                                                                 RTN 2
                             0 0 1 1....UPPER DASE CHARACTERS
                                                                 RTM 3
                             0 1 0 0 ... LOWER CASE CHARACTERS
                                                                 RTN 4
                               1 0 1...REGISTRATION
                                                                 RTM 5
                             0 1 1 0....BACKSPACE AND INDEX
                                                                 RTN 6
                             O 1 1 1 ... END OF LINE CARRIER RETURN
                                                                 RTM 7
                             1 0 0 D....ROCK
                                                                 RIN 8 4
                               0 0 1 .... ROLL
                                                                 RTM .
                               0 1 D....TWIST
                                                                 RTN 10 *
                                    1 .... PRINT SW 3 DATA
                                                                 RTN 11 *
                             1 1 0 0...KEYBOARD ENTRY
                                                                 RTN 12 +
    ****************************
```

* NOTE. THE KEYBOARD TEST IS NORMALLY ENTERED BY DEPRESSING THE KEYBOARD

SELECTING ROUTINE 12 (TABLE 1). SEE SECTION 5.3 .

REQUEST KEY. HOWEVER THE KEYBOARD TEST CAN HOT BE RUN DN PRINTER D HITHOUT RESERVING PRINTER O FOR EXCLUSIVE USE BY THIS PROGRAM BY

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TABLE 2 DEVICE SELECT FUNCTION

```
********* SET FUNCTION 10 IN SENSE/PROGRAM SWITCHES O AND 1.
* SENSE/PROGRAM * 2. SET PID IN SENSE/PROGRAM SWITCHES 2 THROUGH 7.
* 0 1 2 3 4 5 6 7 * 3. IT IT IS DESIRED YO RUN ALL PRINTERS, NO ENTRY IS
            NEEDED. OTHERWISE, SELECT THE DESIRED PRINTERS.
         * 4. PRESS CONSOLE INTERRUPT.
+10000110+
DATA ENTRY SWITCHES
                    * DESCRIPTION
• • • • • • PRINTER 7
• • • • • 1 · · · · · PRINTER 6
 . . . . 1 ...... PRINTER 5
. . . 1 ..... PRINTER 4
- . . 1 ..... PRINTER 3
. . 1..... PRINTER 2
 1 PRINTER THAT IS USED AS
                       THE MONITOR LOG DEVICE. THIS HAS .
                       BEEN DEFINED IN THE 1053/1016 EDIT .
```

TABLE 3 DATA ENTRY FUNCTION

```
****************** 1. SET FUNCTION 11 IN SENSE/PROGRAM SWITCHES O AND 1.
* SENSE/PROGRAM * 2. SET PID IN SENSE/.RDGARM SWITCHES 2 THROUGH 7.
* 0 1 2 3 4 5 6 7 * 3. SET DESIRED PRINT DATA IN DATA ENTRY SWITCHES 0-15.
             * 4. PRESS CONSOLE INTERRUPT.
                 NOTE -- EACH ENTRY CONTAINS THO CHARACTERS FOR OUTPUT.
                        RDUTINE II MUST BE SPECIFIEC (TABLE 1) FOR
                        THIS DATA TO BE PRINTED.
DATA ENTRY SWITCHESS
                             * DESCRIPTION
* 8 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 *
* x x x x x x x x
                               1ST OUTPUT CHARACTER OR CONTROL WORD .
             X X X X X X X X 2ND DUTPUT CHARACTER OR CONTROL WORD *
```

PROGRAM HALTS

THIS PROGRAM HAS NO HALTS.

- PROGRAM TERMINATION
 - A. STANDARD MONITOR TERMINATION
 - B. PROGRAM CONROL FUNCTION

THE PROGRAM WILL TERMINATE IF NO EDIT INFORMATION HAS BEEN PROVIDED OR IF THE DPERATOR HAS CLEARED DEVICE SELECTION WHILE PROGRAM IS EXECUTING.

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4. PRINTOUTS

1053/1816 FUNCTION TEST

STATUS MESSAGE

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM

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ERROR MESSAGES

PID MID RID RAD NO. WAS S/B D600 E00I 000X XXXX 000X XXXX 0D00 DSW ERROR DN CHECKING FOR READY

THIS MESSAGE MAY COME DUT IN ERROR WHEN DESELECTING A NOT READY TYPEWRITER WHEN RUNNING MULTIPLE TYPEWRITERS.

0600 E002 000X XXXX 000X XXXX XXXX DSW ERROR IMMEDIATELY AFTER OUTPUT COMMANO.

9600 E003 OOOX XXXX OOOX XXXX XXXX INTERRUPT DSW ERRDR

0600 E004 OOOX XXXX OOOX XXXX XXXX LOST PRINTER INTERRUPT. DSW AFTER LAST X10 WRITE COMMAND IS PRINTED.

0600 FOOS OOOC XXXX OOOX XXXX KEYCODE ENTRY ERROR. AN ILLEGAL KEYBOARD COOE HAS BEEN DETECTED.

0600 E006 000C XXXX 000X XXXX 0200 DSW ERROR ON PLACING KEYBDARO IN PROCEED STATUS

0600 E007 000C XXXX 000X XXXX 0000 DSW ERROR AFTER READ KEYBOARD COMMAND

0600 E008 000C XXXX 000X XXXX 6100 DSW ERROR ON READING INTO A STORAGE PROTECTED AREA.

O600 E009 OOOC XXXX OOOX XXXX XXXX MULTIPLE KEYBDARD READ ERRDR. THE CHARACTERS READ DO NOT COMPARE.

5. COMMENTS

THIS FUNCTION TEST IS DESIGNED TO CHECK THE PROPER OPERATION OF THE 1053-1816 STATUS INDICATORS. THE VARIOUS ROUTINES ATO IN DETERMINING THE PROPER ADJUSTMENT OF THE PRINTER.

5.1 THE PRINTER TEST.

THE PRINTER TEST IS A SERIES OF STANOARD TESTS PERFORMED IN DRDER OF COMPLEXITY. EACH TEST HAS TWO LINES OF OUTPUT (THE FIRST IN BLACK AND THE SECOND IN REO). THE DNLY EXCEPTION IS THE REGSITRATION TEST WHICH HAS DNLY ONE LINE.

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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 1053/1816 FUNCTION TEST

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A. THE NORMALLY RUN ROUTINES ARE DONE SEQUENTIALLY AS FOLLOWS

PRINT LAST KEYBOARD ENTRY. CARRIER RETURN AND TABULATE.

UPPER CASE CHARACTERS.

LOHER CASE CHARACTERS. (SHIFT SIDE OF ELEMENT).

REGISTRATION

THIS TEST PRINTS A BLACK "+" ENCLOSED BY A RED "O". IT CHECKS THE BACKSPACE FUNCTION AND THE ALIGNMENT OF THE PRINT.

6. BACKSPACE, INDEX.

CHECKS TABULATE, BACKSPACE, AND LINE FEED FUNCTIONS.

7. END OF LINE CARRIER RETURN

CHECKS TO SEE THAT THE END OF LINE CARRIER RETURN WORKS

R. ROCK

TESTS THE TILT MECHANISM BY TYPING CHARACTERS LOCATED DNE AFTER ANOTHER IN VERTICAL COLUMNS ON THE PRINT HEAD.

9. ROLL

TESTS THE ROTATE MECHANISM BY SELECTING CHARACTERS ONE AFTER ANOTHER IN HORIZONTAL BANDS AROUND THE PRINT HEAD.

IO. TWIST

TESTS THE COMBINEO ROTATE AND TILT MECHANISM BY CAUSING A MAXIMUM ROTATION AND TILT BETWEEN CHARACTERS.

B. ROUTINES AVAILABE FOR EXECUTION ON AN OPTIONAL BASIS FOLLOW,

ROUTINE 11 -- PRINT SW 3 DATA (TABLE 3)

TWO CHARACTERS MAY BE ENTERED VIA THE BIT SWITCHES ON FUNCTION LEVEL 11 (TABLE 3). THE DATA IS PRINTED ALTERNATELY TO ENTER THIS MODE, ROUTINE 11 MUST RE SPECIFIED (TABLE 1).

THE KEYBOARD TEST

THE KEYBOARD TEST IS ENTERED BY DEPRESSING THE KEYBOARD REQUEST KEY ANY TIME WHILE THE PRINTER TEST IS RUNNING THAT PRINTER.

ONLY AF PRINTER O IS AN 1816 AND ITS KEYBOARD IS TO BE TESTED, THEN ROUTINE 12 MUST BE SPECIFIED BEFORE DEPRESSING KEYBOARD REQUEST.

DEPRESSING EOF WHILE IN PROCEED STATUS WILL CAUSE THE PRINTER TO RETURN TO ROUTINE I AND PRINT THE KEYBOARD ENTRY. TO REENTER THE KEYBOARD TEST.
THE OPTION MUST AGAIN BE SET. (SEE SECTION 5.3).

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AT THIS TIME THE OPERATOR MAY ENTER ANY NUMBER OF CHARACTERS. EACH CHARACTER ENTERED IS PRINTED AS IT IS KEYED IN. WHEN THE EOF KEY IS DEPRESSED. THE FIRST 48 CHARACTERS ENTERED WILL BE REPRINTED WHEN THE PROGRAM RESTARTS THE PRINTER TEST. THOSE CHARACTERS LAST KEYED I ARE NOW INCLUDED AS ROUTINE 1 OF THE STANDARD PRINTER TESTS. FND TRANSMISSION OF DATA, END KEYBOARD THE NEXT CHARACTER (IF ALPHA)

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5.3 ROUTINE 12 OPTION

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM

1053/1816 FUNCTION TEST

THIS OPTION RESERVES EXCLUSIVE USE OF PRINTER O TO THIS PROGRAM. THIS OPTION MUST BE SPECIFIED IF AND ONLY IF THE KEYBOARD ON PRINTER O IS TO BE TESTED.

ROUTINE

LINE FEED

FUNCTION

WILL BE IN LOWER CASE.

ALL KEYBOARD KEYS RETAIN THEIR NORMAL USE EXCEPT.

ERASE FIELD

0-2-8

(PRINTER O IS THAT PRINTER WHICH HAS BEEN EDITED AS THE FIRST EDIT POSITION).

IF THE MONITOR IS USING PRINTER O TO DUTPUT MESSAGES. THIS OPTION WILL CAUSE.

- 1. THE SUPPRESSION OF ALL 1816 PRINTER O PRINTOUTS NOT ORIGINATED BY THIS PROGRAM.
- 2. A LACK OF MONITOR RESPONSE TO CONSOLE INTERRUPT UNTIL THE MONITOR CAN AGAIN PRINT ON PRINTER D.
- 3. THE TEMPORARY DELAY OF CONTINUATION OF OVERLAP, UNTIL COMPLETION OF THE KEYBOARD ROUTINE.

---- LAST PAGE -----

THE KEYBOARD ROUTINE IS ENDED BY DEPRESSING THE EOF KEY WHILE IN FROCEED STATUS. THIS ACTION ALSO RESETS THE ROUTINE 12 OPTION.

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1053/1816

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 1053/1816 FUNCTION TEST

6 APPENDIX

THE FOLLOWING EDIT PROCEDURE IS FOR CARD INPUT. THE EDIT PROCEDURE FOR PAPER TAPE INPUT IS LOCATED IN THE PAPER TAPE EDIT UTILITY PROGRAM DOCUMENTATION. THE PROPER EDIT CAROS 6.1 EDIT PROCEOURE MUST BE THE LAST CARDS IN THIS PROGRAM DECK. THE FOLLOWING FORMS ARE PROVIDED TO ALO IN MANUALLY PREPARING THESE EDIT CARDS OR UPDATING EXISTING EDIT CARDS. IF IT IS NECESSARY TO PREPARE OR MODIFY EDIT CARDS, FILL IN THE NECESSARY DATA IN THE FORMS PRIOR TO PUNCHING THE CARDS. CARD COLUMNS THAT ARE SHADED SHOULD BE LEFT BLANK.

ODEF STANDS FOR DEVICE OFFINITION EDIT FIELD. IT INCLUDES: 1. THE INTERRUPT LEVEL ASSOCIATED WITH THIS DEVICE (USE HEX NOTATION, 00-17).

2. THE ILSW BIT POSITION ASSOCIATED WITH THIS DEVICE (USE HEX NOTATION, O-F). 3. THE CHANNEL ASSIGNED TO THIS DEVICE (0-8). IF THIS IS A DPC DEVICE, PUNCH AN "F" IN THE CARD COLUMN.

THE LAST EDIT CARD IS THE "END EDIT CARD". THE INFORMATION IN THIS CARD INCLUDES: 1. AN "E" IN COLUMN 1. 2. THE PID FOR THIS PROGRAM (COL. 2-3)

3. A TERMINATOR WORD OF "FFF" (COL. 7-10). CARD 0 - HAS ONE DDEF ENTRY FOR EACH OF THE TYPEWRITERS ON THE SYSTEM (PRTR. 1 - PRTR. 8), ONE ENTRY TO DEFINE WHICH OF THESE ARE 1816'S (IDENTIFY 1816'S), AND ONE DDEF ENTRY TO IDENTIFY WHICH OF THE TYPEWRITERS HAS BEEN ASSIGNED AS THE DIAGNOSTIC MONITOR'S OUTPUT DEVICE. WHEN A TYPEWRITER IS ASSIGNED AS THE DIAGNOSTIC MONITOR'S OUTPUT DEVICE, THE DDEF IS PUNCHED IN THE MONITOR OUTPUT DEVICE ENTRY, AND THE TYPEWRITER'S NORMAL DDEF ENTRY WILL BE PUNCHED 0000. IF THE C.E. WISHES TO USE THE 1443 AS THE DIAGNOSTIC MONITOR'S OUTPUT DEVICE, THERE IS NO NEED

TO ALTER THE 1053/1816 EDIT CARD. (REFER TO EDIT CARD ZERO OF THE DIAGNOSTIC MONITOR.)

CARD END IS THE "END EDIT CARD". PUNCH EXACTLY AS IS SHOWN. IMPORTANT: NO TWO DDEF'S CAN BE ALIKE AND ANY UNUSED DDEF'S MUST BE PUNCHED WITH ZEROS.

*THE 1816 IDENTIFICATION FIELD SHOULD BE PUNCHED IN THE FOLLOWING MANNER:

1. IN FIGURE AT RIGHT, PLACE A 1 IN THE POSITIONS CORRESPONDING TO 1816 DDEF'S.

2. PLACE ZEROS FOR EACH ONE WHICH IS NOT AN 1816.

3. CONVERT THE RESULTANT NUMBER TO HEX AND ENTER THAT NUMBER IN COLS. 62 AND 63.

| 1816 10 EDIT | MON. OUTPUT | PRINTER 1 | | | | PRINTER 5 | | | |
|--------------|-------------|-----------|---|---|---|-----------|---|---|---|
| | Ω | | 0 | 0 | 0 | | 0 | 0 | ŀ |

| | | | | | | | | | Ol | NITO JTPU DEV | OR T | PT | R. 1 | ۱ ۲ | PTR DD | . 2 | ۱۲ | PTR DD | . 3 | F | TR. | 4 | PT | R. 5 | | PTR. | 6 | Γ | PTR. | _F 7 | P | TR. | 8 | 18 | ENTI 316's | FY * | | | | | |
|--------|---------------|---------------|----------|-----------|---------------|--|----------|------------------------|----------------|---------------------|-------------|--------------------------|-------------|--------------|-------------|----------|-----------|-------------|--|-----------|--|--------|--|--------------|--------------|-------------|--|----------|-------------|----------------|--------------|----------|---|--------------|----------------|--------|----------------|------------------|----------|--------|----------|
| | | | | | NCE | | | IES | | DDEF | | | DEF | -1 1 | | <u>ن</u> | | | (OR E) | | | (OR F) | | F) | | | OR F) | 1 | | | - | | OR F) | Г | IDENTIFICATION | | | | | - 1000 | |
| | | PROGRAM 1D | | | CARD SEQUENCE | a la | ł | NUMBER OF EDIT ENTR | | LEVEL (HEX) | | INTERRUPT LEVEL (HEX) | ILSW BIT | | LEVEL (HE | CHANNEL | Ш | LEVEL (HEX) | LLSW BI | INTERRUPT | ILSW BIT | 1. | | ILSW BIT | NTERRITO | LEVEL (HEX) | CHANNEL | INTERRUF | LEVEL (HEX) | CHANNEL (OR | INTERRUPT | LEVEL (I | CHANNEL | 9181 | IDENTIF | 1 6 | 56 1 | - | 71 | | |
| COLUMN | -iCT | 2 3 | 415 | 671 | 8 9 1 | 01112 | 2 13 | 1415 | 16 17 | 18 19 | 20 2 | 1 | | 26 | | | 31 | | | 36 | | 141 | | ┷ | 10 | ╪ | ## | ₹₩ | ┿ | ╪╪ | ~ | + | ++ | 7 | #=#= | ᅻᆍ | 77 | 77 | 7寸 | ŦŦ | 77 |
| | 詍 | | 17 | 4 | | 7 | | | \overline{a} | | | 3 | \top | 13 | | | | | | 31 | | | 3 | | | | $oldsymbol{ol}}}}}}}}}}}}}}}}}}$ | 77 | <u> </u> | 1 | Z | | | 77 | 0 | 101 | | | 777 | | <u> </u> |
| CARD O | _ <u>E</u> | 061 | 010 | 71FT | וטוט | 0 27 | 0[0] | UIA | <u> </u> | | مــــ | <u> </u> | | _DZ | | | 123 | | | | - | | 4 1 | 7 | KV | 7 7 | | <u> </u> | TT | | 4 | П | 77 | 77 | TT | T | \Box | TI | _[] | | |
| | ╢╴ | 1.1.1 | 7.1 | 74.1 | - ا - ا | 101 | \Box | | Z | | TR | 1 | | \mathbf{N} | | . | \square | | ! | | - | | 3 1 | 11 | \mathbf{N} | | | | | \perp | ZZ | Ш | | 77 | | 7_6 | | | 777 | | -1 |
| END | E | 100 | 0 0 | ZI.1 | , , | .177 | | | Z | | 4 | 7 | | | نسيليب | | 727 | | | | | | - | | KV | | | <u> </u> | 7 7 | | <u>~</u> | Т | | 74 | TT | | 17 | \top | 13 | \top | |
| | | $1 \top \top$ | 17 | 21 | × | M | \Box | | 11 | П | T | 31 | | 1 | | | | | | | | | $\perp \mathcal{L}$ | | 12 | | | 77 | | | ZZ | | | 77 | | 118 | \square | <u>ئىل</u> | <u> </u> | | |
| | -#- | 4_1_4 | | \sim | | W | | ليليا | 77 | | مــــ | <u> </u> | | | | · | XXI | | | CO T | | | V | тт- | 177 | | | 77 | TT | Ţ | .77 | П | | M | TT | \top | \overline{a} | | 1/3 | | 1 |
| | -11- | 111 | 11 | \square | | 13 | \sqcap | | 11 | | | 1 13 | | Ø | | | 0 | 1 | | | | | | | 10 | لـلـ | | Z | \perp | | 77 | Ш | لــــــــــــــــــــــــــــــــــــــ | 77 | | 1 | | | <u> </u> | | |
| | -#- | ┸ | | | للل | <u> </u> | | لسلسا | 777 | | | | | - 221 | | | KV | 7 | TT | 77 | | | NI | TT | 177 | 17 | | 1/2 | 11 | | 11 | П | | 11 | TT | 17 | 73 | | 111 | | 1 1 |
| | | $\Pi\Pi$ | \sqcap | | _[_[| | | | | | | $ \mathcal{E} $ | 11 | 13 | | 1 1_ | 13 | | | | | | 7 | 11 | <u>12</u> | | | 77 | | | | Ш | | 777 | | | 77 | | _07 | 1806 | |

DATE 28FEB66 01MAY66 010CT67 EC NO.415120 415120A 411875

PROG ID 0806 -*

PAGE 4

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM

PART NO. 2196368 PAGE

1053/1816 FUNCTION TEST

CARRIER RETURN

CARRIER RETURN

;\$:!RZ96WOFPMU425KB@&-08YQHGPX75VNECLT31/JA &!:="ZRIFDW; -UMDBKS+|?>%HQY:-XPGENY><TLCAJ_{
\$642087531/TVXY-SUWZ; \$ROMK&QPNLJACEGH@BDF|: ACEGH%BDF|&!RDMK>QPNLJ_TVXY?SUWZ:=";-+|:>>{
\$642087531/TVXY-SUWZ; \$ROMK&QPNLJACEGH@BDF|: ACEGH%BDF|&!RDMK>QPNLJ_TVXY?SUWZ:=";-+|:>>{
\$642087531/TVXY-SUWZ; \$ROMK&QPNLJACEGH@BDF|: ACEGH%BDF|&!RDMK>QPNLJ_TVXY?SUWZ:=";-+|:>>{
\$642087531/TVXY-SUWZ; \$ROMK&QPNLJACEGH@BDF|: ACEGH%BDF|&!RDMK>QPNLJ_TVXY?SUWZ:=";-+|:>}

FIGURE 1

SAMPLE OUTPUT OF 1053 PROGRAM.

DATE 28FEB66 01MAY66 010CT67 EC NO. 415120 415120A 41:875

| 1 | | | | | | | | | |
|-----|--------------|------------|---------|--------|----------------|----------------------------|--------------------|---|---------|
| | | | | | | | | | |
| IBM | MAINTENANCE | OIAGNOSTIC | PROGRAM | EDR TH | E 1800 | SYSTEM | | | 2196366 |
| 105 | 3/1816 FUNCT | ION TEST | | | | | PA GE | | 1 |
| | • | | * | | | | 8060002 | | |
| | | | * | | | 1000 0110000710 0001700 | 8060003 | | |
| | | | * | | | 1800 DIAGNOSTIC MONITOR | 8060004 | | |
| | | | * | | | TRANSFER VECTOR | 8060005 8060006 | | |
| | | | * | | | IRANSPER VECTOR | 8060007 | | |
| | | | * | | | | 8060008 | | |
| | 0120 0 | | BEGIN | FOU | 300 | | 8060009 | | |
| | 012D 0 | | START | | BEG 1N | £ 1 | 8060010 | | |
| | 012E 0 | | END | EQU | START | 8.1 | 8060011 | 0 | |
| | 012F 0 | | LOG | EQU | END& 1 | - | 8060012 | | |
| | 0130 0 | | ERROR | EQU | LOG&1 | | 8060013 | 0 | |
| | 0131 0 | | REQDV | EQU | ERROR | £ 1 | 8060014 | 0 | |
| | 0132 0 | | RELOV | | REQOV | | 8060015 | | |
| | 0133 0 | | | EQU | RELDV | £ 1 | 8060016 | | |
| | | | * | | | | 8060017 | | |
| | | | * | | | | 8060018 | | |
| | | | * | | | E DF INDEXES EOR REEERENCE | 8060019 | | |
| | | | * | | | TO PRINTER STATUS TABLES | 8060020 | | |
| | | | * | | TAIDEY | REG 3 ALWAYS HAS THE ADOR | 8060021 8060022 | | |
| | | | * | | | | 8060022 | | |
| | | | * | | | OF THE PRINTER TABLE | 8060024 | | |
| | 0000 0 | | ADR | EQU | 0 | | 8060025 | | |
| | 0001 0 | | RTN | EQU | ĭ | | 8060026 | | |
| | 0002 0 | | STS | EQU | 2 | | 8060027 | | |
| | 0003 0 | | OUT | EQU | 3 | | 8060028 | | |
| | 0004 0 | | ITR | EQU | 4 | | 8060029 | | |
| | 0005 0 | | SLT | EQU | 5 | | 8060030 | 0 | |
| | 0006 0 | | NO\$ | EQU ' | [^] 6 | | 8060031 | 0 | |
| | 0007 0 | | PAO | EQU | 7 | | 8060032 | 0 | |
| | 0 8000 | | WRT | EQU | 8 | | 8060033 | | |
| | 000A 0 | | PTR | EQU | 10 | | 8060034 | | |
| | 000C 0 | | KEY | EQU | 12 | | 8060035 | | |
| | 000E 0 | | SEE | EQU | 14 | | 8060036 | 0 | |

| 0004 | 0 | | 1. | TR | EQU | 4 | | | | | | | | 8060029 | 0 |
|------|---|---------------|-------|--------------|------|----------------|------|--------|----------------|----------|------|-------|-----|---------------------------|----|
| 0005 | Ō | | | LT | EQU | 5 | | | | | | | | 8060030 | Ō |
| 0006 | 0 | | NO | D S | EQU | ['] 6 | | | | | | | | 8060031 | 0 |
| 0007 | 0 | | | 40 | EQU | 7 | | | | | | | | 8060032 | 0 |
| 8000 | 0 | | | RT | EQU | 8 | | | | | | | | 8060033 | 0 |
| A000 | 0 | | Ъ. | TR | EQU | 10 |) | | | | | | | 8060034 | 0 |
| 0000 | 0 | | KI | ΕY | EQU | 12 | 2 | | | | | | | 8060035 | 0 |
| 000E | 0 | | SI | EE | EQU | 14 | + | | | | | | | 8060036 | 0 |
| 0010 | 0 | | Ef | RR | EQU | 16 | 5 | | | | | | | 8060037 | 0 |
| | | | * | | | | | | | | | | | 8060038 | 0 |
| | | | * | | | | | | | | | | | 8060039 | 0 |
| 07FF | | | | | ORG | * 8 | 2047 | 7 | | | | | | 8060040 | 0 |
| | | | ** | **** | **** | **** | **** | **** | **** | **** | *** | *** | * | 8060041 | 0 |
| | | | * | | | | (| DIAGNO | STIC | MONIT | OR | | * | 8060042 | 0 |
| | | | * | | | | | | ONTROL | | | | * | 8060043 | 0 |
| | | | * | | | | J | 1800 9 | TEREO | 1816 | -105 | 3 | * | 8060044 | 0 |
| | | | * | | | | | | JNCTID | | | | * | 8060045 | |
| | | | z/c z | **** | **** | **** | **** | **** | ***** | **** | *** | **** | ** | 8 0 600 4 6 | |
| 07FF | | | | I D | DC | /(| 0600 | | PRDGR | | | | | 8060047 | |
| 0800 | | | | I D | DC | 1 | | | ONE T | | | | | 8060048 | |
| | | 0 9E 3 | | ۸D | DC | | RCON | | TEST | | | | | 8060049 | |
| | | 0000 | | M O | DC | | 0000 | | ECN 0 | | NTRO | | | 8060050 | |
| | | 0000 | | W1 | DC | | 0000 | | ECN 0 | | | | | 8060051 | 0 |
| | | 0000 | | W2 | DC | | 0000 | | PTR S | | | | ł | 8060052 | |
| | | 0000 | Si | W3 | DC | | 0000 | | DATA | | | | | 8060053 | |
| | | 08FE | | | DC | G | | | INITI | | | | | 8060054 | |
| | _ | 091E | | | DC | | GAIN | | LODP | | | | | 8060055 | _ |
| | | OCBC | | PA | DC | | END | | END P | | | | | 8060056 | |
| | | 0000 | | LSCE | DC | 0 | | | PRDGR | | | Ł FLL |) | 8060057 | |
| | | FFFF | \$ 1 | ERM | DC | | FFFE | | TERMI | | | | | 8060058 | |
| | | 0EFD | | | DC | | END | | LAST | PROGR | AM A | DDR | | 8060059 | |
| | | 0000 | | | DC | 0 | | | | | | | | 8060060 | |
| | | 0000 | | | DC | 0 | | | | | | | | 8060061 | |
| | | 0000 | | | DC | 0 | | | 7000 | - ALL AL | ٥٠٠ | | | 8060062 | |
| | | 0000 | UI | NLIN | | | 0000 | | ZERD | | | | | 8060063 | |
| 0810 | U | 0002 | al. | | DC | /(| 2002 | | CDMPA | | | | , н | 8060064 | |
| 0011 | ^ | 0000 | * | DEEC | 5.0 | | | DEAICE | DEFI | | | | , | 8060065 | |
| | | 0000 | | DEFO | | | 0000 | | MDNIT | | | G DEV | r | 8060066 | |
| | | 0000 | | DEE1 | | | 0000 | | PRINT | | _ | | | 8060067 | |
| | | 0000 | | DEE2 DEF3 | | | 0000 | | PRINT PRINT | | | | | 8060068 8060069 | |
| 0014 | U | 0000 | U | UEFO | UC | / (| ,000 | | FKINI | EK NU | ح | | | 000000 | ·U |
| | | | | | | | | | | | | | | | |

| DATE | 28FEB66 | 01MAY66 | 27JUN66 | 010CT67 | 17JUN68 | 14NOV69 | 20MAR70 | PROG ID | 0806-1 |
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| EC NO. | 415120 | 415120A | 415178A | 411875 | 411939 | 431319 | 431320 | PA GE | I |

| | | | • | | |
|---------------------------------|-----------------|---|----------------------|-------|--------------------------------------|
| IBM MAINTENANCE DIAGNOSTIC | PRDGRAM FOR TH | HE 1800 SYSTE | М | | PART NO. 2196 |
| 1053/1816 EUNCTION TEST | | | | | PA GE |
| 0815 0 0000 | DDEF4 DC | /0000 | PRINTER NO 4 | 8 | 0600700 |
| 0816 0 0000 | DDEE5 DC | /0000 | PRINTER NO 5 | | 0600710 |
| 0817 0 0000 | DDEE6 DC | /0000 | PRINTER ND 6 | | 0600720 |
| 0818 0 0000 | DDEE7 DC | /0000 | PRINTER NO 7 | | 0600730 |
| 0819 0 0000 | DDEF8 DC | /0000 | PRINTER ND 8 | 8 | 0600740 |
| | * | | | 8 | 0600750 |
| 081A 0 C400 | P16EF DC | /C400 | 1816 IDENT WDRD | | 0600760 |
| 0818 0 0000 | DDEEX DC | *-* | DDEEO SAVE AREA | - | 0600770 |
| | * | ` * * * * * * * * * * * * * * * * * * * | ******* | | 0600780 |
| | * | DOINT | TO INTERDUCT COUTING | | 0600790 |
| | * | PRINI | ER INTERRUPT ROUTINE | | 0600800 0600810 |
| 081C 0 0000 | INTSW DC | /0000 | INTERRUPT EXSPECTED | | 0600820 |
| 081D 0 0000 | DVAO DC | /0000 | PTR O AREA CODE | | 0600830 |
| | * | | | | 0600840 |
| 081E 0 0000 | PTROI DC | /0000 | PTR O INTERRUPT RTN | | 0600850 |
| 081F 0 1010 | SLA | 16 | CLEAR ACC | 8 | 0600860 |
| 0820 0 DOEB | STD | INTSW | CLEAR INTERRUPT SW | | 0600870 |
| 0821 0 COE8 | LD | P16EE | SET PRINTER ID | | 0600880 |
| 0822 0 18D0 | RTE | 16 | | | 0600890 |
| 0823 1 6700 0EA8 0825 0 404A | | .3 PTRO | | | 0600900 |
| 0826 1 4C80 081E | BS I BSC 1 | COMIN PTRCI | | | 0600910 |
| 0020 1 4000 0016 | BSC 1 | PIROI | | | 0600920 |
| | * | | | | 0600930 0600940 |
| 0828 0 0000 | DVA1 DC | /0000 | PTR 1 AREA CDDE | | 0600950 |
| | * | | THE THE | | 0600950 |
| 0829 0 0000 | PTR1I DC | /0000 | PTR 1 INTERRUPT RTA | | 0600970 |
| 082A O COEE | LD | P16EF | SET PRINTER ID | | 0600980 |
| 082B 0 18CE | RTE | 15 | | 8 | 0600990 |
| 082C 1 6700 0EBA | | .3 PTR1 | | 8 | 0601000 |
| 082E 0 4041 | BSI | COMIN | | | 0601010 |
| 082E 1 4C80 0829 | BSC I | PTR1I | | | 0601020 |
| | * | | | | 0601030 |
| 0831 0 0000 | * DVA2 DC | 40000 | 0TD 2 4054 COOF | | 0601040 |
| 0031 0 0000 | * | /0000 | PTR 2 AREA CODE | | 0601050 |
| 0832 0 0000 | PTR2I DC | /0000 | PTR 2 INTERRUPT RTN | _ | 0601060 |
| 0833 0 C0E6 | LD | P16EF | SET PRINTER ID | | 0601070 0601080 |
| 0834 0 18CE | RTE | 14 | SET TRINIER ID | | 0601090 |
| 0835 1 6700 OECC | LDX L | 3 PTR2 | | | 0601100 |
| 0837 0 4038 | BSI | COMIN | | | 0601110 |
| 0838 1 4080 0832 | BSC I | PTR2I | | I X 8 | 0601120 |
| | * | | | | 0601130 |
| 083A 0 0000 | * DVA3 DC | 10000 | DTD 3 ADEA CODE | | 0601140 |
| 003A 0 0000 | DVA3 DC | /0000 | PTR 3 AREA CODE | | 0601150 |
| 083B 0 0000 | PTR3I DC | /0000 | PTR 3 INTERRUPT RTN | | 0601160 |
| 083C 0 CODD | LD | P16EE | SET PRINTER ID | | 0 60117 0 0 6011 80 |
| 083D 0 18CD | RTE | 13 | SET FRINTER ID | | 0601190 |
| 083E 1 6700 0EDE | | 3 PTR3 | | | 0601200 |
| 0840 0 402E | BSI | COMIN | | | 0601210 |
| 0841 1 4C80 083B | BSC I | PTR3I | | | 0601220 |
| | * | | | | 0601230 |
| | * | | | 8 | 0601240 |
| 0843 0 0000 | DVA4 DC | /0000 | PTR 4 AREA CODE | 8 | 0601250 |
| 0844 0 0000 | * DTD (1 DC | 40000 | | | 0601260 |
| | PTR4I DC | /0000 | PTR 4 INTERRUPT RTN | | 0601270 |
| 0845 0 COD4 0846 0 18CC | LD RTE | P16 E F 12 | SET PRINTER ID | | 0601280 |
| 0847 1 6700 OEEO | | 3 PTR4 | | | 0601290 |
| 0849 0 4026 | BSI | COMIN | | | 0601300 |
| 084A 1 4C80 0844 | BSC I | | | | 0601310 0601320 |
| | * | • | | | 0601330 |
| | * | | | | 0601340 |
| 084C 0 0000 | DVA5 DC | /0000 | PTR 5 AREA CODE | | 0601350 |
| | * | | | | 0601360 |
| 084D 0 0000 | PTR5I DC | /0000 | PTR 5 INTERRUPT RTN | | 0601370 |
| | | | | | |
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| | | | | | |

28FEB66 01MAY66 27JUN66 01DCT67 17JUN68 14NOV69 20MAR70

415120 415120A 415178A 411875 411939 431319 431320

EC NO.

PRUG ID 0806-1

PAGE

PART NO. 2196366 PAGE 2 18M MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM

1053/1816 FUNCTION TEST

| 28FEB66 415120 | 01MAY66 415120A | 27JUI 4151 | | | | UN68 939 | | 20MAR7 431320 | | PROG ID PAGE | 0806 - 1 |
|--------------------------|--------------------|---------------|--------------|--------|-------------------------|-------------|--------------------------|------------------|---|-------------------------------|-----------------|
| | | | | | , | | | | | | |
| 088F 0 100 0890 0 F01 | | | SLA | | 1 K0400 | KEYRN | NOT READY | | | 80602040 80602050 | |
| 088E 0 D01 | - | | STO | | DETS | SAVF | ACC | | | 80602030 | |
| 088D 0 6B1 | 0 | | STX | 3 | DET X& 1 | SAVE | | | | 80602020 | |
| 088¢ 0 000 | 0 | * DETE | DC | | *-* | ENTRY | | | | 80602000 80602010 | |
| | | * | | | CK IF 1053 | FOR 1 | 816 | | | 80601990 | |
| | | * | | | JJ., 17. | | | | | 80601970 | |
| 0889 1 6F0 088B 0 70E | | | STX | L3 | ERIND COMIX | SET E | RROR INDICA | TOR | | 80601960 80601970 | |
| 0888 0 DB1 | | | STD | | ERR | | DSW ERROR | | | 80601950 | |
| 0887 0 70E | F | | MDX | | COMIX | DSW D | | | | 80601940 | |
| 0886 0 400 | 5 | * KEYER | BST | | DETE | CK IF | 1053 FOR 18 | 816 | | 80601920 80601930 | |
| 0885 0 70F | 1 | * | MDX | | COMIX | | | | | 80601910 | |
| 0884 0 700 | | | MDX | | KEYER | | | | | 80601900 | |
| 0883 0 100 | | | NOP | | | | | | | 80601890 | |
| 0881 1 B40 | | | CMP | L | K8000 | BR IF | DSW ERROR | | | 80601880 | |
| 0880 0 18D | | | RTE | L | 16 | | | | | 80601860 80601870 | |
| 087D 0 D30 087E 1 C40 | | COWIL | STO LD | 3 | \$TS K8000 | | | | | 80601850 | |
| 087C 0 C07 | | COMT | LD | _ | II | CHECK | PTR INT | | | 80601840 | |
| 087A 1 4C2 | | | BSC | L | COM I1,62 | BR IF | | | | 80601830 | |
| 0879 0 180 | 0 | TIPE | RTE | | 16 | | | | | 80601820 | |
| 0011 I 400 | 0 0010 | | | | | ***** | ****** | **** | | 80601800 | |
| 0876 0 0B0 0877 1 4C8 | | COMIX | XIO BSC | 3 I | PTR COM IN | SENSE | - RESET DSI | W | | 80601790 80601800 | |
| 0875 0 700 | | | MOX | 2 | TIPE | CENTE | - DECET OC | u | | 80601780 | |
| 0874 0 OBO | Α | | XIO | | PTR | | - RESET DS | | | 80601770 | |
| 0872 1 B40 | 0 0960 | | CMP | L | K8000 | | PTR SELECT | | | 80601760 | |
| 0870 0 000 0871 0 C30 | - | COMIN | LD | 3 | STS | | | | | 80601740 80601750 | |
| 0870 0 0 00 | 0 | * COMIN | DC | | /0000 | | | | | 80601730 | |
| 086E 1 4C8 | 0 0868 | | BSC | I | PTR8I | | |] | X | 80601720 | |
| 0860 0 400 | | | BSI | | COMIN | | | | | 80601710 | |
| 086B 1 670 | | | LDX | L3 | PTR8 | | | | | 80601700 | |
| 0869 0 COB 086A 0 18C | | | LD RTE | | P16EF 8 | SEI P | RINTER ID | | | 80601680 80601690 | |
| 0868 0 000 | | PTR8I | | | /0000 D1455 | | INTERRUPT F | RTN I | E | 80601670 | |
| | | * | | | | | _ | | | 80601660 | |
| 0867 0 000 | 0 | OVA8 | DC | | /0000 | PTR 8 | AREA CODE | | | 80601650 | |
| | | * | | | | | | | | 80601630 8060 1 640 | |
| 0865 1 4C8 | 0 085F | * | BSC | I | PTR7I | | |] | X | 80601620 | |
| 0864 0 400 | _ | | BSI | | COMIN | | | | | 80601610 | |
| 0862 1 670 | | | LDX | L3 | PTR7 | | | | | 80601600 | |
| 0861 0 180 | | | RTE | | 9 | ' | | | | 80601590 | |
| 085F 0 000 0860 0 C0B | - | PTR 7I | DC LD | | /00 0 0 P16EF | | INTERRUPT F RINTER ID | KIN I | E | 80601570 80601580 | |
| 005E 0 000 | 0 | * DTD 71 | nc | | /000 0 | DTO 7 | INTERRUPT | D TAL . | c | 80601560 | |
| 085E 0 000 | 0 | DVA7 | DC | | /0000 | PTR 7 | AREA CODE | | | 80601550 | |
| | | * | | | | | | | | 80601540 | |
| 0090 1 408 | ס כחט ט | * | იან | I | PTR6 I | | | , | X | 80601520 80601530 | |
| 085B 0 401 085C 1 4C8 | | | BS I BS C | | COMIN | | | | | 80601510 | |
| 0859 1 670 | | | LDX | L3 | PTR6 | | | | | 80601500 | |
| 0858 0 18C | Ā | | RTE | | 10 | | | | | 80601490 | |
| 0857 0 COC | | . 11.01 | LD | | P16EF | | RINTER ID | KIN I | - | 80601470 | |
| 0856 0 000 | 0 | * PTR6I | DC. | | /0000 | PTR A | INTERRUPT F | RTN I | E | 80601460 80601470 | |
| 0855 0 000 | 0 | DVA6 | DC | | /0000 | PTR 6 | AREA COOE | | | 80601450 | |
| | _ | * | | | | | | | | 80601440 | |
| | | * | | - | | | | | | 80601430 | |
| 0853 1 4C8 | | | BSC | I | PTR5I | | | 1 | X | 80601410 80601420 | |
| 0850 1 670 0852 0 401 | | | LDX BS I | L3 | PTR5 COMIN | | | | | 80601400 | |
| 084F 0 18C | | | RTE | | 11 | | | | | 80601390 | |
| | _ | | | | | | | | | | |

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM PART NO. 2196366 PAGE 1053/1816 FUNCTION TEST

| 3, 101. | | | | - 5 1 | | | | | | |
|---------|---------------|---|---------------|---------------|-------|--------------|----|------------|-------------------------|-------------------|
| | 0891 | 1 | 4 C 20 | 089B | | BSC | L | DETR.Z | BCH IF KYBD READY | 80602060 |
| | | | | | * | | | | | 80602070 |
| | 08 93 | | | | | LDX | 3 | 6 | | 80602080 |
| | 0894 | 0 | C009 | | DETG | LD | | DETX&1 | XR 3 VALUE | 80602090 |
| | | | F700 | | | EOR | L3 | DETBL-1 | COMPARE PTR ADRS | 80602100 |
| | 0897 | 1 | 4C18 | 08A2 | | BSC | L | DETC1,&- | BCH IF PTR FOUND | 80602110 |
| | 0899 | 0 | 73FF | | | MDX | 3 | -1 | | 80602110 |
| | 089A | 0 | 70F9 | | | MDX | | DETG | • | 80602120 |
| | | | | | * | | | | | 80602130 |
| | 089B | 1 | 7401 | 088C | DETR | MDX | L | DETE,1 | ADJ RETURN ADRS, ERR | 80602150 |
| | | | 6700 | | DETX | LDX | | *-* | RESTORE XR 3 | |
| | 089F | | | 0000 | UCIA | LD | LJ | DETS | RESTORE ACC | 80602160 |
| | | | 4C80 | 0886 | | BSC | ī | DETE | | 80602170 |
| | UUMU | - | 4000 | 0000 | * | 036 | I | DETE | RETURN VIA ENTRY | 80602180 |
| | 00.40 | , | 6100 | 0014 | | | | 01.55 | | 80602190 |
| | | | C400 | 081A | DETCI | | L | P16EF | | 80602200 |
| | 08 4 4 | | | | | SLA | 3 | 0 | | 80602210 |
| | 08A5 | | | | | BSC | | С | IS 1053 FOR 1816 | 80602220 |
| | 0886 | | | | | MDX | | DETR | * NO | 80602230 |
| | 08 A 7 | O | 70F5 | | | MDX | | DETX | * YES | 80602240 |
| | | | | | * | | | | | 80602250 |
| | 8A80 | 1 | 0EA8 | | DETBL | DC | | PTRO | MON LOG PTR | 80602260 |
| | 08A9 | 1 | OEBA | | | DC | | PTR1 | PTR1 ADRS | 80602270 |
| | AA80 | 0 | 0000 | | | DC | | *-* | NOT USED | 80602280 |
| | 08AB | 0 | 0000 | | DETS | DC | | ボーボ | ACC STORAGE | 80602290 |
| | 08 A C | 0 | 0400 | | K0400 | | | /0400 | CONSTANT | 80602300 |
| | 08AD | | | | | DC | | PTR5 | PTR5 ADRS | |
| | 00111 | • | 0. 02 | | * | DC. | | FIND | FIRS ADRS | 80602310 |
| | 08AE | Λ | DOAA | | | CTO | | TEMPY | CAVE ACC | 80602320 |
| | 08AF | | | | KBDOL | | | TEMPX | SAVE ACC | 80602330 |
| | | | | 0003 | | SLA | | 16 | CLEAR ACC | 80602340 |
| | | | | 0803 | | STO | L | SW1 | REMOVE RTN 12 SELECTION | 80602350 |
| | 08B2 | | | | | LD | | TEMPX | RESTURE ACC | 80602360 |
| | 0883 | 0 | 7003 | | | MDX | | CDMI2 | | 80602370 |
| | | _ | | | * | | | | | 80602380 |
| | 0884 | | | | COMII | | | 14 | | 80602390 |
| | | | 4C28 | 08BF | | BSC | L | KBDRQ+&Z | BR IF KBD REQUEST | 80602400 |
| | 08B7 | 0 | 1802 | | COMI2 | RTF | | 18 | | 80602410 |
| | 0888 | 0 | C302 | | | LD | 3 | STS | | 80602420 |
| | 0889 | 1 | B400 | 0 C 89 | | CMP | L | KE000 | | 80602430 |
| | 08 BB | 0 | 702C | | | MDX | | COMI4 | CHECK PRTR INTRPT | 80602440 |
| | 08BC | 0 | 70BA | | | MDX | | COMIX | | 80602450 |
| | | | | | * | | | | | 80602460 |
| | 08 BD | 0 | C037 | | | LÐ | | KA000 | SELECT KEYBOARD NEXT | 80602470 |
| | 08BF | | | | | MDX | | COMIL | STEEDT RETEDAND NEXT | 80602470 |
| | | | | | * | | | 3.37.12 | | |
| | 08BE | 1 | 7400 | 080E | KBDRQ | MDV | L | ONL IN , O | IS IT ON-LINE | 80602490 |
| | 0861 | | | 0001 | KODKQ | | _ | | | 80602500 |
| | | | C400 | 0003 | | MDX | | KBDOL | * YES | 80602510 |
| | | | | | | LÐ | L | SW1 | * NO, GET RTN NUMBER | 80602520 |
| | | | E400 | | | AND | L | BASIC | REMOVE BAD BITS | 80602530 |
| | | | F400 | | | FOR | L | TWLVE | | 80602540 |
| | | | 4C18 | 08 CD | | BSC | L | KBDRR,&- | BR IF ROUTINE 12 | 80602550 |
| | 08CA | | | | | FD | 3 | PTR | FETCH PTR NUMBER | 80602560 |
| | 0 8C B | 1 | 4C18 | 0877 | | BYC | L | -3,XIMOD | BR IF PRINTER ZERO | 806025 7 0 |
| | 08CD | 0 | C027 | | KBDRR | LD | | KA000 | SELECT KEYBOARD NEXT | 80602580 |
| | 08CE | 0 | D302 | | | S T O | 3 | STS | | 80602590 |
| | 1380 | 0 | OBOE | | | XIO. | 3 | SEE | DESELECT KEYBOARD | 80602600 |
| | | | | | * | | _ | | | 80602610 |
| | 0800 | 1 | C400 | OA2F | | LD | L | TWLVE | | 80602620 |
| | 08D2 | | | | | ST0 | | RTN | SET RIN NUMBER | 80602630 |
| | | | | | * | | _ | | | |
| | 0803 | 0 | 6357 | | • | LDX | 2 | -25 | INITIALIZE KEYBOARO | 80602640 |
| | | | 6F00 | OBAR | | STX | | WRUCT&1 | * ROUTINE | 80602650 |
| | 0806 | | | CMJ | | | | | ROUTINE | 80602660 |
| | | | 6F00 | ORC 4 | | LDX | 3 | | | 80602670 |
| | 0809 | | | UDU 0 | | STX | | SLTWD | | 80602680 |
| | | | | 0.505 | | LDX | 3 | | | 80602690 |
| | | | 6F00 | | | STX | | ANY&2 | | 80602700 |
| | OBDC | 1 | 6F00 | UAA4 | | STX | L3 | RSADR&1 | | 80602710 |
| | | | | | * | | | | | 80602720 |
| | ORDE | 1 | C400 | 0803 | | LD | L | SW1 | | 80602730 |
| | | | | | | | | | | |
| | | | | | | | | | | |

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| MAINTENANCE | OIAGNOSTIC | PROGRAM | FDR TH | E 1800 SYS | TEM | PART NO. 2190 PAGE |
|------------------|---------------------------|----------------|--------------|------------------|---|------------------------------|
| 3/1816 FUNCTI | DN TEST | | | | | |
| 08E0 1 | E400 0B06 | | ANO L | BASIC | REMOVE BAO BITS | 80602740 |
| 08E2 0 | | | SRA | 1 | | 80602750 |
| | 4C20 0877 0400 0803 | | BSC L | COMIX,Z | BR IF SW1 NOT 1 OR O | 80602760 |
| 0000 1 | 0400 0803 | * | STO L | SW1 | | 80602770 806027 80 |
| 08E7 0 | 708F | | MDX | CDMIX | EXIT | 80602780 |
| | | * | | | | 80602800 |
| | F400 0BCB | COMI4 | | KF000 | | 80602810 |
| 08EA 0 | | | BSC | Z | SKIP IF READ KEYBOAR | 80602820 |
| 08EB 0 08EC 0 | | | MO X | COMIL-1 KCOOO | GO CHECK PTR INT | 80602830 |
| 08E0 0 | | | LO STO : | STS | | 80602840 80602850 |
| 08EE 0 | | | LD . | K4000 | | 80602860 |
| 08EF 0 | | | RTE | 16 | | 80602870 |
| 08F0 0 | | | CMP | K4000 | BR IF KBO ERRDR | 80602880 |
| 08F1 0 | | | NOP | Keneb | | 80602890 |
| 08F2 0 08F3 0 | | | MDX MOX | KEYER COMIX | | 80602900 80602910 |
| 00.50 | 1003 | * | MOX | COMIX | | 80602910 |
| | | * | | | | 80602930 |
| | | * | | | | 80602940 |
| | | * | | | | 80602950 |
| 005/ 0 | (000 | * | 00 | // 000 | CONSTANTS | 80602960 |
| 08F4 0 08F5 0 | | K4000 KA000 | | /4000 /A000 | CONSTANTS | 80602970 806029 80 |
| 08F6 0 | | | nc | 2 | | 80602990 |
| 08F7 0 | | FSTSW | | *-* | ZERO AFTER FIRST PASS | 80603000 |
| 08F8 0 | 0000 | SWSTG | OC | ホー キ | SW2 STDRAGE | 80603010 |
| | | | | | ******** | 80603020 |
| 08F9 0 | 0000 | TEMPX | | **** | TEMPORARY STORAGE | 80603030 |
| 08FA 0 | 49EC | TYCUS | | | ********* | 80603040 |
| | 4480 012C | | BSI I | FSTSW BEGIN | SET FIRST SWITCH CALL ON MONITOR | 80603050 80603060 |
| 08F0 1 | | | 00 | PID | * | 80603070 |
| | | ***** | **** | ***** | ******** | 80603080 |
| | | * | | | | 806030 9 0 |
| | | * | | INI | TIALIZATION ROUTINE | 80603100 |
| 08FE 0 | 0000 | * GO | oc | /0000 | S.E. | 80603110 |
| 08FF 0 | | | LO | FSTSW | SE GET FIRST SWITCH | 80603120 80603130 |
| | 4C18 090C | | BSC L | GO1,&- | BCH IF NDT FIRST PASS | 80603140 |
| | C400 0811 | Į | LO L | OOEFO | GET MON LOG DEF | 80603150 |
| | 0400 081B | | STO L | 00£FX | * AND SAVE IT | 80603160 |
| | C400 0804 | | LO L | SW2 | SAVE SW2 | 80603170 |
| 0908 1 090A 0 | 0400 08F8 1010 | | STO L SLA | SWSTG | CLEAR ACC | 80603180 |
| 090B 0 | | | STO | 16 FSTSW | CLEAR ACC * ANO CLEAR SWITCH | 80603190 80603200 |
| | 6700 OF38 | | | B PTR8 | GET LAST PTR ADRS | 80603210 |
| 09 0E 0 | 6209 | | | 9 | | 80603220 |
| 090F 0 | | | L O | K8000 | | 80603230 |
| 0910 0 | | RESET | | STS | RESET STATUS | 80603240 |
| 0911 0 | 2F40 000C | | | KEY,/40 | CLEAR STORAGE PROT | 80603250 |
| 0913 0 | | | _ | 3 -18 2 -1 | | 80603260 80603270 |
| 0915 0 | | | MOX | RESET | | 80603270 |
| 0916 1 | 6 E00 09 B9 | | | PRSEL | | 80603290 |
| 0918 0 | | | BSI | AGAIN | | 80603300 |
| | 6500 0962 | | | RQST | SET MAIN LINE | 80603310 |
| | 6D00 0809 | | | . MLSCF | * SEQ CONTROL FIELO | 80603320 |
| 0410 1 | 4C80 08FE | | | GO | SX ******** | 80603330 |
| | | * | ·-· | | r T T T T T T T T T T T T T T T T T T T | 80603340 |
| | | * | | וחחו | P PRDGRAM ROUTINE | 80603350 80603360 |
| | | * | | 2001 | THE OTHER POOR STATE | 80603370 |
| 091F 0 | | AGAIN E | DC DC | /0000 | | 80603380 |
| | C400 0804 | | .D L | | GET FUNC 2 | 80603390 |
| 0922 1 0924 0 | 7400 080F | | MDX L MDX | ONLIN,O AGAN1 | TEST ON LINE * YES | 80603400 |
| | 7 (41) 1 | | | | | 80603410 |

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 1053/1816 FUNCTION TEST 0925 0 7018 MOX AGAN8 * ND

80603420 80603430 0926 0 6100 AGAN1 LDX 80603440 0927 1 6000 0849 STX L1 OSWCS+1 CHANGE VALUE 80603450 0929 1 4020 0932 BSC L AGAN5,Z BCH IF PRINTER SELECTEO 80603460 0928 0 61F7 LDX 80603470 092C 1 C500 081A AGAN2 LD L1 DOEF0&9 GET DOEF ENTRY 80603480 092E 1 4C20 093A BSC L AGAN4, Z IS IT ZERD 80603490 0930 0 7101 MDX 1 1 * YES 80603500 0931 0 70FA MOX AGAN2 80603510 80603520 0932 0 6100 AGAN5 LDX 1 0 80603530 0933 0 4828 BSC 2 3 IS PRINTER FOUNO 80603540 0934 0 7003 MOX AGAN6 * YES 80603550 0935 0 1001 SLA * NO 80603560 0936 0 7101 MOX 1 1 80603570 0937 0 70FB MDX AGAN5&1 80603580 80603590 0938 1 C500 0811 AGAN6 LD L1 DDEFO 80603600 093A 1 D400 0811 AGAN4 STO L ODEFO STORE PTR TO TEST 80603610 093C 0 C023 LD K8000 80603620 0930 0 7006 MOX ХX 80603630 80603640 093E 1 C400 0804 AGAN8 LD L SW2 80603650 0940 1 4C20 0944 BSC L XX,Z BCH IF PTR SELECTED 80603660 0942 1 C400 0986 LD L KFF80 * NO, SELECT ALL PTR 80603670 0944 1 0400 0804 STO L SW2 SET PTR SELECTEO 80603680 0946 1 0400 09B7 STD L SWCMP 80603690 80603700 0948 1 6500 09BA LDX L1 SELT SET MAIN LINE 80603710 094A 1 6D00 0809 STX L1 MLSCF * SEQUENTIAL CONTROL 80603720 094C 1 4C80 091F BSC I AGAIN 80603730 ************ 80603740 80603750 094E 1 0811 DOEFS DC 80603760 094F 1 0812 00EF1 80603770 0950 1 0813 DOEF2 80603780 0951 1 0814 00 DDEF3 80603790 0952 1 0815 00 DOFF4 80603800 0953 1 0816 DC DDF E5 80603810 0954 1 0817 DC ODEF6 80603820 0955 1 0818 DC DDEF7 80603830 0956 1 0819 DC DDEF8 80603840 80603850 0957 1 0810 DC DVAS OVAO ADDR DF AREA CODE 80603860 0958 1 0828 DC DVAI 80603870 0959 1 0831 00 OVA2 80603880 095A 1 D83A DVA3 80603890 0958 1 0843 DVA4 80603900 095C 1 084C DC DVA5 80603910 095D 1 0855 DC OVA6 80603920 095E 1 085E 00 DVA7 80603930 095F 1 0867 ОC DVA8 80603940 80603950 80603960 0960 0 8000 K8000 OC /8000 PTR SVC INT DSW S/B 80603970 0961 0 C000 KC000 DC /C000 80603980 ***************** 80603990 80604000 REQUEST DEVICE ROUTINE 80604010 80604020 80604030 0962 1 6700 OCDO RQST LOX L3 TEND3 80604040 0964 1 6600 0984 LDX L2 RQST8 80604050 0966 0 61F7 LOX 1 -9 80604060 0967 1 C5DO 081A RQST1 LD L1 ODEFO89 80604070 0969 1 4C20 0976 BSC L RQST2,Z BR IF DEVICE EOITEO 80604080 0968 0 7101 RQST3 MDX 1 1 80604090

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| 6 FUNCTION TEST | | | | | | FAGC | 7 |
|--------------------------------|---------------|-----------|------------|------------|-------------|--|--------|
| • | | | | | | | |
| 096C 0 70FA | MOX | | | | _ | 806041 0 0 | |
| 096D 0 C028 | LO | RQSTT | TERMI | NATE FIELD | DS | 80604110 | |
| 096E 0 D300 | STD | | | | | 80604120 | |
| 096F 0 D200 | STD * | 2 0 | | | | 80604130 | |
| 0070 1 5400 001 | | 1 01/55 | | | | 80604140 | |
| 0970 1 C400 081 0972 0 E043 | | L P16EF | | E PROPER E | EDIT | 80604150 | |
| | AND | | REMOVE | BAO BITS | | 80604160 | |
| 0973 1 D400 081 | | | | | | 80604170 | |
| 0975 0 7008 | MDX * | RQSTC | | | | 80604180 | |
| | | | | | | 80604190 | |
| 0976 1 C500 095 | * RQST2 LO | L1 DDEFS& | .0 01 4.00 | DEVICE | | 80604200 | |
| 0978 0 D200 | STD | | | DEVICE | | 80604210 | |
| 0979 0 7201 | MDX | | | TANTS IN | EACE | 80604220 | |
| 097A 0 D300 | STD | | ÷ AREA | EST & RELE | EASC | 80604230 | |
| 0978 0 7301 | MOX | | T ANCA | .3 | | 80604240 80604250 | |
| 097C 1 C500 0960 | | LÍ OVASES | 1 | | | | |
| 097E 0 0200 | STD | 2 0 | , | | | 80604260 806 0 4270 | |
| 097F 0 7201 | MDX | | | | | 80604270 | |
| 0980 0 70EA | MDX | | | | | | |
| 0,00 0 .024 | * | Kesis | | | | 80604290 | |
| | | **** | **** | ****** | * * * * * * | 80604300 | |
| | * | | | **** | | 80604310 | |
| b | * | | | | | 80604320 | |
| 0981 0 4480 013 | | I REQDV | ncour | ST DEVICE | * | 80604330 | |
| 0983 1 09AD | DC DC | RQST5 | | RETURN | * | 80604340 | |
| 0984 0 7012 | ROST8 MDX | | 6031 | KETUKN | * | 80604350 | |
| 0985 0 7011 | MOX | | | | * | 80604360 | |
| 0986 0 7010 | MDX | • | | | * | 80604370 | |
| 0987 0 700F | MOX | | | | * | 80604380 80604390 | |
| 0988 0 700E | MOX | | | | * | 80604400 | |
| 0989 0 700D | MOX | | | | * | | |
| 098A 0 700C | MDX | | | | * | 80604410 80604420 | |
| 098B 0 700B | MDX | | | | * | | |
| 098C 0 700A | MOX | | | | * | 80604430 | |
| 098D 0 7009 | MOX | | | | * | 80604440 80604450 | |
| 098E 0 7008 | MDX | | | | * | 80604460 | |
| 098F 0 7007 | MDX | | | | * | | |
| 0990 0 7006 | MDX | | | | * | 80 60 4470 8 060 4480 | |
| 0991 0 7005 | MDX | | | | * | 8 06 044 9 0 | |
| 0992 0 7004 | MDX | | | | * | 80604500 | |
| 0993 0 7003 | MDX | | | | * | 80604510 | |
| 0994 0 7002 | MDX | | | | * | 80604520 | |
| 0995 0 7001 | MDX | | | | * | 80604520 | |
| 0996 1 080A | RQSTT DC | TERM | | | * | 80604540 | |
| | | **** | ****** | ***** | | 80604550 | |
| 0997 1 6700 0F3 | | | | XID COMMA | | 80604560 | |
| 0999 0 6109 | LDX | | 00110 | ATO COMPA | 41103 | 80604570 | |
| 099A 1 C580 095 | | II OVAS-1 | l | | | 80604580 | |
| 099C 0 E816 | DR | K0100 | • | | | 80604590 | |
| 099D 0 D309 | STD | | | | | 80604600 | |
| 099E 0 E815 | DR | K0701 | | | | 80604610 | |
| 099F 0 D308 | STO | | | | | 80604620 | |
| 09A0 1 C580 095 | | II DVAS-1 | | | | 80604620 | |
| 09A2 1 ECOO 08A | | L K0400 | • | | | 80604640 | |
| 09A4 0 D30D | STO | | | | | 80604650 | |
| 09A5 1 C580 095 | | II DVAS-1 | | | | 80604660 | |
| 09A7 0 E80D | OR | K0200 | | | | 80604670 | |
| 09A8 0 D30F | STO | | | | | 80604680 | |
| 09A9 0 73EE | MDX | | | | | 80604690 | |
| 09AA 0 71FF | MDX | _ | | | | 80604700 | |
| 09AB 0 70EE | MDX | | | | | 80604710 | |
| | * | 80120 | | | | 80604720 | |
| 09AC 0 700D | MDX | SELT | | | | 80604720 | |
| 27 0 1000 | * | JEEI | | | | 80604740 | |
| | * | | | | | 80604740 | |
| 09AD 1 6500 098 | | L1 RQSTC | TRY L | ATER | | 80604750 80604760 | |
| 09AF 1 6D00 080 | | | 1111 L | AT CIN | | 80604770 | |
| 277 2 0500 000 | Mag 17 STA | ET MESCI | | | | 00004110 | |
| | | | | | | | |
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09B1 0 4C80 012D 8SC I START 80604780 80604790 80604800 09B3 0 0100 K0100 DC /0100 80604810 0984 0 0701 K0701 DC /0701 80604820 09B5 0 0200 K0200 DC /0200 80604830 0986 0 FF80 KFF80 DC /FF80 CUNSTANT 80604840 09B7 0 0000 SWCMP DC /0000 SW2 COMPARE WORD 80604850 TEMP DC 09B8 0 0000 /0000 80604860 09B9 0 0000 PRSEL DC /0000 NO OF PTRS SELTD 80604870 80604880 098A 1 C400 0804 -SELT LD L SW2 80604890 09BC 0 1807 SRA 80604900 098D 1 4C08 0C83 BSC L TYEND,& END IF NO SELECT 80604910 09BF 1 4400 08FE BSI L GD DESELECT ALL PTRS 80604920 09C1 0 6109 LDX 19 80604930 09C2 1 6700 0F38 LDX L3 PTR8 80604940 09C4 1 C400 0804 LD L SW2 80604950 09C6 0 1806 SRA 80604960 SELT7 BSI 09C7 0 4009 WHCH SELECT PRINTER 80604970 3 STS 09C8 0 C302 LD 80604980 09C9 0 F096 EDR K8000 80604990 09CA 1 4C20 09D8 8SC L WHCH1,Z BR IF PTR SELTD 806**0**5000 80605010 09CC 1 7401 09B9 MDX PRSEL,1 SELECT ONE PRINTER L 80605020 09CE 0 COF8 LD SELT7 80605030 09CF 0 D302 STO MDX 3 STS 80605040 0900 0 7007 WHCH1 80605050 80605060 80605070 80605080 80605090 09D1 0 0000 DC /0000 CAN PTR 8E LEGALLY 80605100 * SELECTED DR 80605110 09D2 0 D0E5 09D3 0 C0E4 * DESELECTED 80605120 80605130 WHCH2 LD TEMP 0904 0 1801 SRA 80605140 09D5 0 D0E2 STD TEMP 80605150 09D6 0 4804 BSC 80605160 09D7 0 7004 WHCH4 MOX FOUND ONE WNTD 80605170 09D8 0 73EE WHCH1 MDX 3 -18 80605180 0909 0 71FF MDX 1 -1 80605190 09DA 0 70F8 MDX WHCH2 80605200 09D8 0 7007 MDX PRCDN 80605210 09DC 1 C580 0956 WHCH4 LD II DVAS-1 80605220 09DE 1 4C18 09D8 BSC WHCH1,&-BR IF ND PTR THERE 80605230 09E0 1 4C80 09D1 80605240 80605250 8SC WHCH RET TO SEL DR DESEL 09E2 0 0000 ERIND DC /0000 ERROR INDICATOR 80605260 80605270 PRINTER TEST 80605280 80605290 09E3 1 C400 OEAA PRCON LD L PTROESTS FETCH STS DF PTRO 80605300 09E5 0 1004 80605310 80605320 SLA 09E6 1 4C28 09F4 BSC L CKERR,&Z BR IF NO RELES PTRO 80605330 09E8 1 C400 0803 LD SW1 FETCH ROUTINE ND 80605340 09EA 1 E400 0B06 AND L BASIC REMDVE 8AD BITS 80605350 09EC 0 F042 EOR TWLVE 80605360 09ED 1 4C20 09F3 BSC L CKHAV,Z BR IF NDT KBD RTN 80605370 80605380 09EF 1 C400 081A LD L P16EF 80605390 09F1 1 4C28 09F4 BSC L CKERR,&Z BR IF 1816 80605400 80605410 09F3 0 4022 CKHAV BSI CKREL CHECK RELEASE 80605420 80605430 09F4 0 C0ED CKERR LD ERIND 80605440 09F5 1 4C20 0809 BSC L INERR,Z 8R IF ERROR INDICATO 80605450

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DATE 28FE866 01MAY66 27JUN66 01DCT67 17JUN68 14NDV69 20MAR70 PROG ID 0806-1 EC NO. 415120 415120A 415178A 411875 411939 431319 431320 PAGE

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| Description | 09F9 0 F0BD 09FA 0 1807 09FB 1 4C20 09 09FD 0 C0BB 09FE 1 4C08 06 0A00 0 6600 06 0A02 1 6700 0F 0A04 0 C302 0A05 0 D060 0A06 1 4C10 0A 0A08 0 B024 0A09 0 7027 0A0A 0 1001 0A0B 1 4C18 0A 0A0D 0 180E 0A0E 1 8400 08 0A10 0 7028 0A11 0 7002 0A12 0 6102 0A14 0 6101 | 33 ***** ****** ****** ****** ***** EXEC 1 **** EXEC 2 | EDR SRA BSC LD BSC ******* LDX LDX | L **** L2 L3 | SWCMP 7 SELT,Z PRSEL TYEND,& ******** | BR IF LAST PTR DONE | 80605470 80605480 80605490 80605500 80605510 |
|--|---|---|---|-----------------------|---------------------------------------|----------------------|--|
| 09F9 0 F08D | 09FA 0 1807 09FB 1 4C20 09 09FD 0 C0BB 09FE 1 4C08 00 0A00 0 6600 00 0A02 1 6700 0F 0A04 0 C302 0A05 0 D060 0A06 1 4C10 0A 0A08 0 B024 0A09 0 7027 0A0A 0 1001 0A0B 1 4C18 0A 0A0D 0 180E 0A0E 1 B400 08 0A10 0 7028 0A11 0 7002 0A12 0 6102 0A13 0 7031 0A14 0 6101 | ****** ****** ****** ***** ***** **** | EDR SRA BSC LD BSC ******* LDX LDX | L **** L2 L3 | SWCMP 7 SELT,Z PRSEL TYEND,& ******** | BR IF LAST PTR DONE | 80605480 80605490 80605500 80605510 |
| OPFR 1 4C20 098A | 09FB 1 4C20 09 09FD 0 C0BB 09FE 1 4C08 00 0A00 0 6600 00 0A02 1 6700 0F 0A04 0 C302 0A05 0 D060 0A06 1 4C10 0A 0A08 0 B024 0A09 0 7027 0A0A 0 1001 0A0B 1 4C18 0A 0A0D 0 180E 0A0E 1 B400 08 0A10 0 7028 0A11 0 7002 0A12 0 6102 0A13 0 7031 | ****** ****** ****** ***** ***** **** | BSC LD BSC ****** LDX LDX LDX LDX LDX STO | L *** L2 L3 | SELT,Z PRSEL TYEND,& ******* | BR IF LAST PTR DONE | 80605490 80605500 80605510 |
| ### ### ### ### ### ### ### ### ### ## | 09FD 0 COBB 09FE 1 4C08 00 0A00 0 6600 00 0A02 1 6700 0F 0A04 0 C302 0A05 0 D060 0A06 1 4C10 0A 0A08 0 B024 0A09 0 7027 0A0A 0 1001 0A0B 1 4C18 0A 0A0D 0 180E 0A0E 1 B400 08 0A10 0 7028 0A11 0 7002 0A12 0 6102 0A13 0 7031 | ****** ****** ****** ***** ***** **** | LD BSC ****** LDX LDX LDX | L *** L2 L3 | PRSEL TYEND,& ******* | BR IF LAST PTR DONE | 80605500 80605510 |
| OPFD O COBB OPFD O COBB OPFD OP | 09FE 1 4C08 00 0A00 0 6600 00 0A02 1 6700 0F 0A04 0 C302 0A05 0 D060 0A06 1 4C10 0A 0A08 0 B024 0A09 0 7027 0A0A 0 1001 0A0B 1 4C18 0A 0A0D 0 180E 0A0E 1 B400 08 0A10 0 7028 0A11 0 7002 0A12 0 6102 0A13 0 7031 | ****** ****** ****** ***** **** **** **** | BSC ***** LDX LDX LDX LDX ST0 | *** L2 L3 | TYEND • & ******* | | 80605510 |
| OFFE 1 4C08 OCB3 | 09FE 1 4C08 00 0A00 0 6600 00 0A02 1 6700 0F 0A04 0 C302 0A05 0 D060 0A06 1 4C10 0A 0A08 0 B024 0A09 0 7027 0A0A 0 1001 0A0B 1 4C18 0A 0A0D 0 180E 0A0E 1 B400 08 0A10 0 7028 0A11 0 7002 0A12 0 6102 0A13 0 7031 | ***** * * * * * * * * * * * * * * * * | BSC ***** LDX LDX LDX LDX ST0 | *** L2 L3 | TYEND • & ******* | | |
| # | OAO2 1 6700 OF OAO4 0 C3O2 OAO5 0 DO60 OAO6 1 4C10 OA OAO8 0 B024 OAO9 0 7027 OAOA 0 1001 OAOB 1 4C18 OA OAOB 1 4C18 OA OAOD 0 180E OAOE 1 B400 OB OA10 0 7028 OA11 0 7002 OA12 0 6102 OA13 0 7031 | * * * * * * * * * * * * * * * * * * * | LDX LDX LD STO | L2 L3 | | ******* | 000000000 |
| March Marc | OAO2 1 6700 OF OAO4 0 C3O2 OAO5 0 DO60 OAO6 1 4C10 OA OAO8 0 B024 OAO9 0 7027 OAOA 0 1001 OAOB 1 4C18 OA OAOB 1 4C18 OA OAOD 0 180E OAOE 1 B400 OB OA10 0 7028 OA11 0 7002 OA12 0 6102 OA13 0 7031 | * EXEC 88 EXEC * EXEC 42 * | LDX LD STO | L3 | 9 | | 80605530 |
| 0A00 | OAO2 1 6700 OF OAO4 0 C3O2 OAO5 0 DO60 OAO6 1 4C10 OA OAO8 0 B024 OAO9 0 7027 OAOA 0 1001 OAOB 1 4C18 OA OAOB 1 4C18 OA OAOD 0 180E OAOE 1 B400 OB OA10 0 7028 OA11 0 7002 OA12 0 6102 OA13 0 7031 | 09 EXEC 88 EXEC1 * EXEC2 42 * | LDX LD STO | L3 | 9 | | |
| 0A02 6700 0F38 | OAO2 1 6700 OF OAO4 0 C3O2 OAO5 0 DO60 OAO6 1 4C10 OA OAO8 0 B024 OAO9 0 7027 OAOA 0 1001 OAOB 1 4C18 OA OAOB 1 4C18 OA OAOD 0 180E OAOE 1 B400 OB OA10 0 7028 OA11 0 7002 OA12 0 6102 OA13 0 7031 | 88 EXEC1 * EXEC2 *2 * | LDX LD STO | L3 | | DECTROE DIN CTATUS | |
| | 0A05 0 D060 0A06 1 4C10 0A 0A08 0 B024 0A09 0 7027 0A0A 0 1001 0A0B 1 4C18 0A 0A0D 0 180E 0A0E 1 B400 08 0A10 0 7028 0A11 0 7002 0A12 0 6102 0A13 0 7031 | * EXEC2 42 * | LD STO | | | RESIDRE KIN STATOS | |
| 0A05 0 0060 | 0A05 0 D060 0A06 1 4C10 0A 0A08 0 B024 0A09 0 7027 0A0A 0 1001 0A0B 1 4C18 0A 0A0D 0 180E 0A0E 1 B400 08 0A10 0 7028 0A11 0 7002 0A12 0 6102 0A13 0 7031 | * * 39 | STO | ~ | | | |
| 0A06 4 CL10 0A42 BSC EXEC3,- BR IF PTR SVC RQSTD 80605610 80605620 0A09 0 7027 MDX SVCAD 80605630 80605620 0A09 0 7027 MDX SVCAD 80605640 80605640 80605640 0A08 0 1 CL 1 | 0A06 1 4C10 0A 0A08 0 B024 0A09 0 7027 0A0A 0 1001 0A0B 1 4C18 0A 0A0D 0 180E 0A0E 1 B400 08 0A10 0 7028 0A11 0 7002 0A12 0 6102 0A13 0 7031 | * | | 3 | | | |
| No. | 0A08 0 B024 0A09 0 7027 0A0A 0 1001 0A0B 1 4C18 0A 0A0D 0 180E 0A0E 1 B400 08 0A10 0 7028 0A11 0 7002 0A12 0 6102 0A13 0 7031 | * | DSC | | | PO IF OTO SVC DOSTO | |
| 0A08 0 8024 CMP KF800 80.605.30 0A09 0 7027 MDX SVCAD 80.605.60 0A08 1 4C18 0A39 BSC L EXECO, 6- TAKE NEXT PTR BRANCH 80.605.60 0A08 1 806 | 0A09 0 7027 0A0A 0 1001 0A0B 1 4C18 0A 0A0D 0 180E 0A0E 1 8400 08 0A10 0 7028 0A11 0 7002 0A12 0 6102 0A13 0 7031 0A14 0 6101 | 39 | | L | EXECS,- | BR IF PIR SVC RQSID | |
| 0A09 0 7027 0A0A 0 1001 0A0B 1 4C18 0A39 0A5C 0A0B 1 806056500 0A0D 0 1806 0A10 0 7028 0A11 0 7002 0A12 0 6102 0A12 0 6102 0A13 0 7031 0A13 0 7031 0A14 0 6101 0A15 0 702F 0A15 0 702F 0A16 0 0000 0A17 1 C400 0B11 0A19 1 4C90 0A16 0A19 0 480 0132 0A19 1 080A 0A10 1 0810 0A11 1 080A 0A11 0 809 0A11 1 080A 0A12 0 6908 0A13 0 7031 0A14 0 6908 0A15 0 6908 0A16 0 0000 0A17 1 C400 0B11 0A18 0 480 0132 0A19 1 6900 0A18 0 6908 0A19 1 6900 0A18 0 6908 0A19 1 6900 0A18 0 6908 0A19 1 6900 0A18 0 6900 0A29 0 6800 0000 0A20 | 0A0A 0 1001 0A0B 1 4C18 0A 0A0D 0 180E 0A0E 1 8400 08 0A10 0 7028 0A11 0 7002 0A12 0 6102 0A13 0 7031 | | CMP | | KF800 | | |
| AGAB 1 4C18 GA39 BSC EXECO, 6- TAKE NEXT PTR BRANCH 80605660 | 0A0B 1 4C18 0A 0A0D 0 180E 0A0E 1 8400 08 0A10 0 7028 0A11 0 7002 0A12 0 6102 0A13 0 7031 0A14 0 6101 | | | | | | |
| 0AOD 0 1806 | 0A0D 0 180E 0A0E 1 8400 08 0A10 0 7028 0A11 0 7002 0A12 0 6102 0A13 0 7031 0A14 0 6101 | | | | _ | | |
| OADE 1 8400 08F6 | 0A0E 1 B400 08 0A10 0 7028 0A11 0 7002 0A12 0 6102 0A13 0 7031 0A14 0 6101 | -6 | | L | | TAKE NEXT PTR BRANCH | |
| 0A10 0 7028 | 0A10 0 7028 0A11 0 7002 0A12 0 6102 0A13 0 7031 0A14 0 6101 | <u> </u> | | 1 | | IS KAD SVC PEOSID | |
| 0A11 0 7002 | 0A11 0 7002 0A12 0 6102 0A13 0 7031 0A14 0 6101 | | | _ | | | |
| 0A13 0 7031 | 0A13 0 7031 0A14 0 6101 | | | | | | |
| ## SELECT KEYBOARD SET ## S0605730 OA14 0 6101 | OA14 O 6101 | | LDX | 1 | 2 | READ KBD SET UP | 80605710 |
| 0A14 0 6101 | | J, | MDX | | EXEC681 | | |
| 0A15 0 702F | | | LDV | 1 | 1 | CELECT VEVROARD SET | |
| ## 80.605760 OA16 0 0000 OA17 1 C400 0811 | | LALUS | | 1 | - | SELECT RETBUARD SET | |
| 0A16 0 0000 | | * | .,,,,,,,,, | | | | |
| 0A19 1 4C90 0A16 | | | | | | | |
| Section Color Co | | | | | | | |
| 0A1B 0 4480 0132 | UALY 1 4090 07 | | | | | | |
| 0A1D 1 0811 | 0A1B 0 4480 01 | | | _ | | | |
| 0A1E 1 080A | | | | • | | | |
| 0A1F 0 6908 | 0A1E 1 080A | | | | | | 80605830 |
| 0A20 0 6A09 | 0415 0 4000 | **** | | | | | |
| 0A21 1 6700 0A27 | | | | | - | | |
| 0A23 1 6F00 0809 | | 27 | | | | | |
| X | | | | | | | |
| 0A27 0 6500 0000 | 0A25 0 4C80 01 | 2D | BSC | I | START | GD TO MONITOR | 80605890 |
| 0A29 0 6600 0000 | 0.4.27 0 /5.00 0.0 | | | | ata ata | 2567025 | |
| 0A2B 1 4C80 0A16 | | | | | | | |
| # 80605940 OA2D 0 F800 | | | | | | KESTUKE XKZ | |
| 0A2D 0 F800 | Z5 _ 1000 0F | | 330 | • | | | |
| 0A2F 0 000C TWLVE DC 12 CDNSTANT 80605970 0A30 0 000B ELVEN DC 11 CONSTANT 80605980 0A31 0 6803 SVCAD STX 3 SVC&1 CDUNT DOWN FDR INT 80606000 0A32 1 7402 0A35 MDX L SVC&1,2 80606010 0A34 1 7401 0EAA SVC MDX L PTRO&STS,1 80606020 0A36 0 7002 MDX EXECO 80606030 0A37 0 6103 LDX 1 3 PRINT NO INT ERRDR 80606040 0A38 0 700C MDX EXEC6&1 80606050 ** 80606060 80606060 ** 80606080 80606080 0A39 0 73EE EXECO MDX 3 -1B TAKE NEXT PTR 80606080 0A3B 0 70C8 MDX 2 -1 80606100 0A3B 0 70C8 MDX EXEC2 80606110 | | | | | | | |
| OA30 0 000B | | | | | | 0011574117 | |
| ** 80605990 OA31 0 6803 | | | | | | | |
| OA31 0 6803 | 0A30 0 000B | | DC | | 11 | CONSTANT | |
| 0A32 1 7402 0A35 | 0A31 0 6B03 | | STX | 3 | SVC81 | COUNT DOWN FOR INT | |
| 0A34 1 7401 0EAA SVC MDX L PTR0&STS,1 80606020 80606030 | | | | | | | |
| OA37 0 6103 | | AA SVC | MDX | | | | |
| OA3B 0 700C | | | | | | | |
| * 80606060 * 80606070 * 80606070 * 80606080 * 80606080 * 80606080 * 80606090 * 80606100 * 80606110 * 80606120 | | | | 1 | - | PRINT NO INT ERRDR | |
| * 80606070 0A39 0 73EE EXECO MDX 3 -1B TAKE NEXT PTR 80606080 0A3A 0 72FF MDX 2 -1 80606090 0A3B 0 70C8 MDX EXEC2 80606100 * 80606110 0A3C 0 6109 LDX 1 9 RESTORE RTN STATUS 80606120 | UA30 U /UUL | * | MUX | | EXEC 6& 1 | | |
| OA39 0 73EE | | | | | | | |
| 0A3A 0 72FF MDX 2 -1 80606090 0A3B 0 70C8 MDX EXEC2 80606100 * 80606110 0A3C 0 6109 LDX 1 9 RESTORE RTN STATUS 80606120 | 0A39 0 73EE | | MDX | 3 | -18 | TAKE NEXT PTR | |
| OA3B 0 70C8 MDX EXEC2 80606100 * 80606110 OA3C 0 6109 LDX 1 9 RESTORE RTN STATUS 80606120 | 0A3A 0 72FF | | | | | | |
| 0A3C 0 6109 LDX 1 9 RESTORE RTN STATUS 80606120 | 0A3B 0 70C8 | | MDX | | EXEC2 | | 80606100 |
| | 0426 0 (100 | | 1.50 | | | DECTORE OTH CTITIES | |
| 0735 0 0705 SIX I EXECUT 80806130 | | * | | | | RESTORE RTN STATUS | |
| | 0.00 0 0700 | * | 517 | 1 | - x = 1 2. 1 | | 0.0000130 |
| | | * | | | CYECGI | | |

| MAINTENANCE 3/1816 FUNCT | | | , INDONAL | TON | 1116 | 1000 313 | I E M | PART NO. 21 PAGE |
|-----------------------------|---------------|-------|---------------------|-------------|------|------------------|--|----------------------|
| 77 TOTO TONE | TON | E31 | | | | | | |
| 0A3E 1 | | | | LDX | L1 | PTR8 | | 80606140 |
| 0A40 (| | | | STX | 1 | EXEC181 | | 80606150 |
| 0 A41 (| 7028 | | | MDX | | EXEC9 | | 80606160 |
| 24/2 | | | * | | | | | 80606170 |
| 0A42 (| | | EXEC3 | | | KFC00 | SERVICE PRINTER | 80606180 |
| OA43 (|) PIO(|) | * | LDX | 1 | 0 | | 80606190 |
| 0 A4 4 (| D303 | | | CTO | _ | 6.76 | | 80606200 |
| 0A45 0 | | | EXEC6 | MDX | | STS -18 | UPDATE PRINTER STS | 80606210 |
| 0A46 C | | | | STX | | EXEC1&1 | | 80606220 |
| | | | * | 0 | | LXLOIGI | | 80606230 |
| 0A47 0 | 72FF | | | MDX | 2 | -1 | SKIP IF PTR O | 80606240 80606250 |
| 0A48 0 | 7012 | | | MDX | | EXECA | | 80606260 |
| 0440 | | | 冰 | | | | | 80606270 |
| 0449 0 | | | | LDX | | 9 | RESTORE RTN STATUS | 80606280 |
| 0A4A 0 0A4B 1 | | | | STX | | EXEC&1 | | 80606290 |
| 0A4D 0 | | - | | LDX STX | | PTR8 | | 80606300 |
| OA4E O | | | | BSI | 2 | EXEC1&1 CKREL | CHECK RELEASE | 80606310 |
| | , , , | | **** | | *** | ****** | ********************** | 80606320 |
| 0A4F 1 | | | | MDX | L | INTSW,1 | SET INTR SW | 80606330 80606340 |
| 0A51 0 | | | | NOP | _ | 2 | 5. 111 X 5W | 80606350 |
| 0A52 0 | | 0131 | | BSI | I | REQDV | REQUEST USE OF MON * SC | 80606360 |
| 0A54 1 | | | | DC | | EXEC7 | * LOGGING DEVICE * | 80606370 |
| 0A55 1 | | | | DC | | DDEFO | * | 80606380 |
| 0A56 1 0A57 1 | | | | DC | | DVAO | * | 80606390 |
| UASTI | UOUA | | ste ste ste ste ste | DC | | TERM | ******************* | 80606400 |
| 0A58 1 | 6700 | 0F96 | EXEC8 | | | PTRO-18 | *************** | 80606410 |
| 0A5A 0 | | 02/0 | LALCO | MDX | L3 | ADRS | | 80606420 |
| | | | * | , . | | ADKS | | 80606430 |
| | | | * | | | | | 80606440 80606450 |
| 0 A 5B 0 | 6 AA 5 | | EXECA | STX | 2 | EXEC&1 | RESTORE RTN STATUS | 80606460 |
| | | | * | | | | | 80606470 |
| 0A5C 0 | | | ADRS | MDX | | 19 | SETUP CHAR RINN | 80606480 |
| 0A5D 0 0A5E 0 | | | | STX | | MARKL&1 | | 80606490 |
| 0A5F 0 | | | | MDX | _ | -1 | | 8060650 0 |
| 0A60 1 | | 0462 | | STX BSC | | MARKG&1 NEXT | | 80606510 |
| | | 0.402 | * | 1730 | 11 | MEXI | | 80606520 |
| | | | * | | | | | 80606530 |
| | | | * | | | | | 80606540 80606550 |
| 0A62 1 | | | NEXT | DC | | READY | PRINTER READY & TYPE | 80606560 |
| 0A63 1 | | | | DC | | SELC2 | KBD PROCEED STS | 80606570 |
| 0A64 1 0A65 1 | | | | DC | | KEYBD | READ KEY CHARACTER | 80606580 |
| UAUJ I | OUTA | | * | DC | | NOIN | NO INTERRUPT EXIT | 80606590 |
| 0A66 0 | 0000 | | RESTO | חר | | /0000 | | 80606600 |
| 0 | _ 550 | | * | 50 | | , 0000 | | 80606610 |
| | | | * | | | | | 80606620 |
| 0 A 67 0 | | | EXEC7 | LD | | RESTO | | 80606630 80606640 |
| 0A68 1 | | | | STO | L | PTROESTS | | 80606650 |
| 0A6A 1 | 6 40 0 | OAEF | EXEC9 | LDX | L | MARKX | | 80606660 |
| | | | **** | * * * * | *** | ***** | ****** | 80606670 |
| 0.44.0 | 0001 | | * | | | | | 80606680 |
| 0A6C 0 0A6D 0 | | | I | DC | | 1 | | 80606690 |
| UAGD U | 0000 | | OUTWD * | θC | | *-* | OUTPUT TEMP STG | 80606700 |
| 0A6E 1 | C400 | 0803 | | | | CIII | | 80606710 |
| 0A70 1 | | | | LD And | | SW1 BASIC | DEMONE DAD DATE | 80606720 |
| 0A72 0 | | | | CMP | | ELVEN | REMOVE BAD BITS IS TYPE SWS ROUTINE | 80606730 |
| 0A73 0 | | | | NOP | | | - THE SHS KUUTINE | 80606740 |
| 0A74 0 | | | | MDX | | MARKG | ND | 80606750 |
| | | | * | | | | · - | 80606760 80606770 |
| 0A75 1 | | 0805 | | LD | L | SW3 | | 80606780 |
| 0A77 0 | | | | SRA | | 8 | | 80606790 |
| 0A78 0 | | | | EOR | | I | | 80606800 |
| 0 A79 0 | 4820 | | | BSC | | Z | SKIP IF ILLEGAL CODE | 80606810 |
| | | | | | | | | |

28FEB66 01MAY66 27JUN66 010CT67 17JUN68 14N0V69 20MAR70

411939 431319 431320

415120 415120A 415178A 411875

PRDG ID 0806-1

80608140

80608150 80608160

80608170

1053/1816 FUNCTION TEST

EC NO.

| | OA7A O FOF1 OA7B O OOF1 OA7C O C303 OA7D O 18C8 OA7E O BOEE OA7F O 1000 OA80 O 700A OAB1 1 C400 O805 OA83 O 1008 OA84 O 1808 OA85 O FOE6 OA86 O 4820 OA87 O FOE4 OA88 O 1088 OA89 O D303 OA8A O 7064 OA8B O COE1 OA8C O 70FB OA80 O 6805 OA81 1 C400 O847 OA90 1 D400 OC8A OA92 O 6700 O000 OA94 1 6500 OA92 OA96 O C302 OA97 1 74FF OC8A OA99 O 7001 OA9A O 7002 OA9B 1 4C28 OC7E OA9D 1 C400 O960 OA9F O O302 OA9A 1 74FF O989 OAA0 1 C680 OC8A OAA0 0 C8A OAA0 0 O301 OAA7 1 6E80 OABF OAAC O 1810 OAAC O 1810 OAAC O 1810 OAAC O OC8A OABO 1 F400 OC95 OABE 1 C600 OC8A OABO 1 F400 OC95 OABE 1 C600 OC8A OAAC O 1810 OAAC O OC8A OABO 1 F400 OC95 OABE 1 C600 OC8A | EOR STO LD RTE CMP NOP MOX * LD SLA SRA EOR BSC MDX * MARKA LO MDX * MARKA LOX LOX LOX MOX MOX MOX MOX MOX MOX MOX MOX MOX M | I OUT WO OUT WO MARKB L SW3 8 8 I Z Z I 8 8 3 OUT MARKX OUT WO MARKA 3 MARKRE1 FO200 L TIMEX L3 /0000 L1 MARKR 3 STS L TIMEX,-1 MARKQ MARKP L PDSWX,&Z L K8000 3 STS L PRSEL,-1 L2 1 2 1 3 RTN I2 MARKLE1 L2 1 3 RTN I2 TR MARKLE1 L2 1 1 3 RTN I2 MARKLE1 | SAVE RHS OF OLO WORO CK IF SHOULD 8E * SHIFTEO TAKE RIGHT HALF WORD SKIP IF ILLEGAL CODE SET UP TIME COUNTER RESTORE INDEX REGS OECR TIMER BR IF NO INT YET OESELECT PRINTER RESTORE START ADOR RESTORE TEST PT CK FOR TERMINATOR BR IF TERMINATOR BR IF TERMINATOR BR IF TERMINATOR | 80606820 80606830 80606840 80606850 80606860 80606870 80606880 80606990 80606910 80606920 80606940 80606950 80606960 80606970 80607000 80607020 80607020 80607030 80607040 80607050 80607100 80607100 80607110 80607120 80607140 80607150 80607140 80607150 80607170 80607180 80607190 80607190 80607190 80607190 80607190 80607190 80607290 80607290 80607290 80607300 80607300 80607300 80607300 80607300 80607300 80607300 |
|---|--|---|--|--|--|
| | | BSC LD * A STO | L MARK2,+- L2 FUNR-1 3 PAO 3 ADR | BR IF TERMINATOR | 80607320 80607330 80607340 80607350 80607360 |
| r | OAB8 O 1810 OAB9 O D306 OABA O COB1 | * SRA STO * | 16 3 NOS | RESTORE WORDS PRID | 80607370 80607380 80607390 80607400 80607410 |
| | OABC 0 6580 0000 OABE 0 6680 0000 | * MARKG LDX MARKL LDX | 3 SLT I1 /0000 I2 /0000 | RESTORE INDEX REGS | 80607420 80607430 80607440 80607450 |
| | OACO O C305 OAC1 O 80AA OAC2 O D305 | LO A STO | 3 SLT I 3 SLT | BUMP SFF WO BY ONE | 80607460 80607470 80607480 80607490 |
| | 28FEB66 01MAY66 415120 415120A | 27JUN66 415178A | | UN68 14NOV69 20MAR70 939 431319 431320 | PRUG ID 0806-1 PAGE 6 |

| 1053/1816 FUNCTION TEST | | , <u>-</u> | 2 | ·· | | PAGE |
|----------------------------|----------|------------|--------------|-----------------------|----|--|
| 1033\1910 LOWCLION 1521 | | • | | | | |
| 0462 1 /60/ 0467 | * | | | | | 80607500 |
| 0AC3 1 4C04 0AC7 | | SC L | MARKS,E | SHIFT IF ODD | | 80607510 |
| 0AC5 0 C101 0AC6 0 7008 | Lí | DX I | 1 MARKN | FETCH OUTPUT WORD | | 80607520 |
| 0400 0 1000 | * | | MAKKN | | | 80607530 80607540 |
| 0AC7 0 C306 | MARKS LO | 0 3 | NOS | BUMP WOROS BY ONE | | 80607550 |
| OAC8 0 80A3 | A | _ | I | DOM: WONGS BY ONE | | 80607560 |
| 0AC9 0 D306 | S | TO 3 | NOS | | • | 80607570 |
| | * | | | | | 80607580 |
| OACA 0 7101 | | | 1 | | | 80607590 |
| 0ACB 1 6D80 0ABD | _ | | MARKG&1 | ESTAIN ON TOWN | | 80607600 |
| 0ACO 0 C100 0ACE 0 1008 | Lí | LA I | 0 | FETCH OUTPUT CHAR | | 80607610 |
| OACL 0 1008 | ى * | LA | 8 | SHIFT IT | | 80607620 |
| OACF 0 D303 | MARKN ST | TO 3 | OUT | SAVE NEXT OUTPUT WD | | 80607630 80607640 |
| 0401 0 0303 | * | 10 5 | 001 | SAVE NEXT GOTFOT WD | | 80607650 |
| 0A00 0 F032 | E | OR | KFF00 | | | 80607660 |
| 0A01 1 4C20 0AFF | | SC L | MARKX,Z | BR IF NOT END OF FCN | | 80607670 |
| | * | | | | | 80607680 |
| 0A03 0 C304 | Ļſ | | ITR | DECREMENT ITCHT | | 8 0607 690 |
| 0A04 0 9097 | S | | I | | | 80607700 |
| 0AD5 0 D304 | | | ITR | | | 80607710 |
| 0AD6 1 4C20 0AAE | B: | SC L | MARK5,Z | BR IF NO DO AGAIN | | 80607720 |
| 0A08 0 C306 | ž Lū | n 3 | NOS | UPOATE MODIFIER WORD | | 80607730 |
| 0409 0 8092 | Δ. | | I | OPOATE MOOTFIER WORD | | 80607740 80607750 |
| 0ADA 0 D306 | | | NUS | | | 80607760 |
| OADB 0 8307 | Ă | | PAD | | | 80607770 |
| OADC 0 0307 | s. | TO 3 | PAD | | | 80607780 |
| | * | | | | | 80607790 |
| | * | | | | | 80607800 |
| 0.400 0.6101 | * | _ | | | | 80607810 |
| 0ADD 0 C101 0A0E 0 D304 | Li | | 1 | FFTCH NEXT REPEAT CT | | 80607920 |
| 0ADF 0 F024 | | TO 3 DR | ITR KFFFF | | | 80607830 |
| OAEO 1 4C20 OAAE | | SC L | MARK5,Z | BR IF NOT END OF RIN | | 8060 7 340 8 0607 850 |
| OAE2 1 C400 0803 | MARKK L | | SW1 | BK 17 HOT END OF KIN | | 80607860 |
| 0AE4 0 F021 | | ND | BASIC | ASSURE PROPER ENTRY | | 80607870 |
| OAE5 1 4C18 OAA5 | В. | SC L | MARK3,&- | BR IF NO RTN SELECT | | 80607880 |
| | 水 | | | | | 80607890 |
| 0AE7 C B01F | | MP | ALL | | | 80607900 |
| 0AE8 0 70BC | | DX | MARK3 | BR IF RTN TOO LARGE | | 80607910 |
| OAE9 0 1000 OAEA 0 8019 | | DP | V C C C C | INITIAL IZE DIN CINEN | | 80607920 |
| 0AEB 0 0001 | A 51 | TO | KFFFF *&1 | INITIALIZE RTN GIVEN | | 80607930 80607940 |
| OAEC 0 6600 0001 | | 0X L2 | | | | 80607950 |
| OAEE 0 7086 | | DX | MARK3 | | | 80 6 0 7 960 |
| | * | | | | | 80607970 |
| | * | | | | | 80607980 |
| | * | | | | | 80607990 |
| OAEF 1 6500 09E3 | MARKX L | | PRCON | SET RETURN ADDRESS | | 80608000 |
| OAF1 1 6D00 0809 | | TX L1 | | | | 80608010 |
| OAF3 0 4C80 012D | | SC I | START | ****** | | 80608020 |
| | ** | **** | **** | ******** | | 80608030 |
| 0AF5 0 10A0 | READY SI | т | 32 | | | 80608040 |
| 0AF6 0 0B0A | | | PTR | SENSE - RESET DSW | | 80608050 80608060 |
| 0AF7 1 4420 088C | | SI L | DETE,Z | CHECK 1053 FOR 1816 | | 80608070 |
| 0AF9 0 7026 | | DX | TYPIT | DSW OK | | 80608080 |
| | * | | | | | 80608090 |
| OAFA 0 6101 | RYOER LO | | 1 | ERROR - NOT BUSY | | 80608100 |
| OAFB 1 4400 0C30 | | SI L | | | MC | 80608110 |
| 0AFD 1 6780 0C88 | | | PTRAD | | | 80608120 |
| 0AFF 0 C005 0B00 0 D302 | £ (| | KOCOO | | | 80608130 |
| 0000 U WJUZ | 51 | TO 3 | STS | | | 80608140 |

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM

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LD KOCOO STO 3 STS

BSC L EXEC

0801 1 4C00 0A00

PROG ID 0806-I

EC NO.

| 1 | - | - 4 |
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| F | | |

| INTENANCE DI | | PROGRAM | FDR | THE | 1800 SYSTE | М | PART NO. 2 PAGE |
|--------------------------|---------|----------------|-------------|-----|------------------------|---------------------------|-------------------------------|
| .816 FUNCTION | TEST | | | | | | |
| 0003 0 55 | 00 | * | 0.0 | | 45500 | 65.057.007. | 80608180 |
| 0B03 0 FF 0B04 0 FF | | KFF00 KFFFF | | | /FF00 / FFFF | CDNSTANTS | 80608190 |
| 0B05 0 0C | | KOCOO | - | | /0000 | | 80608200 |
| 0806 0 00 | | BASIC | | | /000F | BASIC ROUTINES | 80608210 80608220 |
| 0807 0 00 | | ALL | DC | | FUND-FUNR | ALL TYPEWRITER RINS | 80608230 |
| 0808 0 00 | | TIMEB | | | /0012 | TIME TO LATCH CLUTCH | |
| | | | | *** | | ******* | |
| | | * | | | | | 80608260 |
| | | * | | | PRINT | INTERRUPT DSW ERRDR | 80608270 |
| | | * | | | | | 80608280 |
| 0809 0 10 | | INERR | | | 32 | RESET ERROR IND | 80608290 |
| OBOA 1 D4 | | TNEDO | STD | L | | INITELL DED MADE FORDS | 80608300 |
| 0B0E 0 62 | | INERO | LDX | | PTR8 9 | WHICH PTR MADE ERROR | |
| 0B0F 0 BB | | INER1 | | | ERR | | 80608320 80608330 |
| 0B10 0 100 | | | NDP | _ | Z KK | | |
| 0B11 0 700 | | | MDX | | INER2 | GDT IT - PRINT ERROR | 80608340 80608350 |
| 0B12 0 73 | | | MDX | 3 | -18 | SS . I | 80608360 |
| 0B13 0 72 | | | MDX | | -1 | | 80608370 |
| 0B14 0 70 | | | MDX | | INER1 | CHECK ALL PRINTERS | 80608380 |
| OB15 1 4C | 00 09E3 | | BSC | L | PRCDN | RETURN - ND MDRE ERR | 80608390 |
| 0017 0 00 | | * | | _ | | | 80608400 |
| 0B17 0 CB | | INER 2 | | | ERR | PRINT INTRPT DSW | 80608410 |
| 0B18 0 610 0B19 1 440 | | | LDX | | | * ERRDR | 80608420 |
| 0B19 1 440 0B1B 1 678 | | | BS I LDX | F | PRDSW PTRAD | | 80608430 |
| 0B1D 0 10 | | | SLT | 13 | 32 | | 80608440 |
| 0B1E 0 DB | | | STD | 2 | ERR | RESET ERROR IND | 80608450 |
| OB1F 0 70 | | | MDX | | INERO | RETURN TO CHECK AGN | 80608460 806084 7 0 |
| | | **** | | *** | | ******** | |
| | | * | | | | | 80608490 |
| | | * | | | | PRINT ONE CHARACTER | 80608500 |
| | | * | | | | | 80608510 |
| 0B20 1 C40 | | TYPIT | | L | SWO | GET FUNCTIONS | 80608520 |
| 0B22 1 4C | | | BSC | L | TOLY6,- | BCH IF ND DELAY | 80608530 |
| 0B24 0 C00 | | | LD | | TIMEB | GET DELAY COUNT | 80608540 |
| 0B25 1 D40 | 00 0C8A | * | STO | L | TIMEX | STORE IN COUNTER | 80608550 |
| 0B27 1 650 | 00 0B2E | TULY2 | LDX | 1.1 | TDL Y4 | GET RETURN | 80608560 |
| 0B29 1 6D0 | | 10212 | STX | | MLSCF | * AND STORE IN TABLE | 80608570 |
| 0B2B 0 6B0 | | | STX | | TDL Y4&1 | SAVE XR 3 | 80608580 80608590 |
| 0B2C 0 4C8 | 30 012D | | BSC | I | START | GO TO MONITOR | 80608600 |
| | | * | | | | | 80608610 |
| OB2E 0 670 | | TDLY4 | LDX | L3 | *-* | RESTORE XR 3 | 80608620 |
| 0B30 1 74F | | | MDX | L | TIMEX,-1 | REDUCE DELAY COUNT | 80608630 |
| 0B32 0 70F | 4 | | MDX | | TDLY2 | | 80608640 |
| 0022 0 02 | | * | | _ | | | 80608650 |
| 0B33 0 0B0 | | TDL Y6 | | | WRT | PRINT CHARACTER | 80608660 |
| 0B34 0 0B0 | | | XIO STO | 3 | PTR | SENSE - RESET DSW | 80608670 |
| 0000 0000 | , , | * | 310 | | DSWBY | | 80608680 |
| | | * | | | CHEC | K BUSY DSW | 80608690 |
| 0B36 0 F00 | Œ | ٠ | EOR | | KOCOO | C DOST DOW | 80608700 80608 7 10 |
| 0B37 1 442 | | | BSI | L | DETE,Z | CHECK 1053 FOR 1816 | 80608710 |
| 0B39 0 7 00 | | | MDX | | BSYOK | DSW DK | 80608730 |
| | | * | | | | - | 80608740 |
| OB3A O C80 | | BSYER | LDO | | DSWBY | PRINT BUSY DSW ERROR | 80608750 |
| 0B3B 0 610 | | | LDX | 1 | | | 80608760 |
| 0B3C 1 440 | | | BSI | L | PRDSW | | MC 80608770 |
| 0B3E 1 678 | | | LDX | | PTRAD | | 80608780 |
| 0B40 1 4C0 | O OA6E | BSYOK | | L | MARK | and the same and the same | 80608790 |
| | | | **** | *** | ******* | ****** | 80608800 |
| | | * | | | | | 80608810 |
| 0B42 000 | 0 | | B C C | _ | 0 | | 80608820 |
| 0B42 0 000 | | DSWBY | BSS DC | С | 0 /0000 | LAST BUSY DSW | 80608830 |
| 0B43 0 0C0 | | FOC00 | | | /0000 | BUSY DSW S/B | 80608840 80608850 |
| | - | . 0000 | | | , 0000 | DO31 D3M 3/D | ロロかけおおうけ |

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| IBM MAINTENANCE DIAGNOSTIC | PROGRAM FOR THE 1800 SYSTEM | PART NO. 2196366 |
|---|---|---|
| 1053/1816 FUNCTION TEST | | PAGE 7A |
| 0844 0 0000 0845 0 0000 0846 0 0000 0847 0 0200 0848 0 0000 0849 0 0100 | DSWAS DC /0000 LAST READY DC /0000 DSWBS DC /0000 F0200 DC /0200 DSWCS DC /0000 STO PROT E DC /0100 DSW S/B | 80608870 80608880 80608890 ERROR DSW 80608900 80608910 |
| | * * | 80608930 80608940 |
| 0B4A 1 C400 0960 | * PRINT ND INTERRU * NOIN LD L K8000 | 80608960 |
| 084C 0 18 D0 084D 0 080A 084E 0 6104 084F 1 4400 0C30 0851 1 4C00 09E3 | RTE 16 XID 3 PTR SENSE - RE LDX 1 4 BSI L PRDSW BSC L PRCON | 80609000 MC 80609010 80609020 |
| | ************************************** | 80609040 |
| | * KEYBOARD TEST * * * * * * * * * * * * * | 3333,300 |
| 0853 0 0B0A 0854 0 D0EF 0855 0 18CB 0856 1 4C04 09E3 0858 1 6500 085E 085A 1 6D00 0809 085C 0 4C80 012D | SELC2 XIO 3 PTR SENSE AND STO DSWAS RTE 11 BSC L PRCON,E BR IF PTR LDX L1 SELC3 STX L1 MLSCF BSC I START | 80609110 80609120 |
| 085E 1 6780 0ABD 0B60 0 C06A 0861 0 D302 0B62 0 C8E1 | * * SELC3 LDX 13 MARKG&1 LD KF000 RESET PTR STO 3 STS LDD DSWAS | 80609170 80609180 80609190 STATUS 80609200 80609210 80609220 |
| 0863 1 4C18 0867 0865 0 6101 0866 0 7009 | * * LDX 1 1 PRINT DSW MDX SELC1 | OK 80609230 80609240 ERROR 80609250 |
| 0867 0 080C | SELC XIO 3 KEY SELECT KEY XIO 3 PTR SENSE - RE | 80609280 |
| 0B69 0 D0DC 0B6A 0 F0DC 0B68 1 4C18 09E3 | STO DSWBS EOR FO200 BSC L PRCON, E- BR IF DSW | 80609300 80609310 |
| 086D 0 C8D8 086E 0 6106 086F 0 7000 | * LDD DSWBS PRINT DSW LDX 1 6 MDX SELC1 | 80609330 ERRUR 80609340 80609350 80609360 |
| 0870 1 4400 0C30 0872 1 6400 0A67 | SELC1 BSI L PRDSW LDX L EXEC7 TRY AGAIN | ******** |
| 0074 6 0000 | * DECODE CHARACTER * *- | 80609430 80609440 |
| 0874 0 080E 0875 0 10A0 0876 0 080A 0877 1 4C18 087E | KEYBD XIO 3 SEE READ AND SI SLT 32 XIO 3 PTR SENSE - RE: | AVE CHAR 80609450 50609460 SET DSW 80609470 |
| 0879 0 6107 087A 1 4400 0C30 087C I 6780 0C88 | BSC L KEYPT, &- LOX 1 7 PRINT DSW I BSI L PRDSW LOX 13 PTRAD | 80609500 806095 1 0 |
| 0B7E 0 C30C | KEYPT LD 3 KEY SAVE KEY CH | 80609520 HARACTER 80609530 |

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415120 415120A 415178A 411875 411939

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PROG ID PAGE

1053/1816 FUNCTION TEST

DATE EC NO.

| 0B7F 0 D04C | STO | KEYCR | | 80609540 |
|--------------------------------------|---------------------|-----------------------|--|--|
| 0B80 1 7400 080F | MDX | L ONLIN.O | IS TEST ON-LINE | 80609550 |
| OBB2 0 7002 | MDX | *&2 | * YES, NO STG PROT ERR | 8060956 0 |
| 0B83 0 2F41 000C | STS XIO | L3 KEY,/41 3 SEE | READ INTO STO PRDT | 806 0 9570 8060958 0 |
| 0B85 0 0B0E 0B86 0 2F40 000C | STS | L3 KEY•/40 | CLEAR STORAGE PROT | 80609590 |
| OB88 O OBOA | X10 | 3 PTR | SENSE - RESET DSW | 8060960 0 |
| 0B89 0 D0BE | STO | OSWCS | | 80609610 |
| OBBA O FOBE | EOR | OSWCS&1 | BR IF DSW OK | 8 060 9620 80 60 9630 |
| OBBB 1 4C18 OB93 | BSC * | L KEYIN, &- | BK IF D3W UK | 806 0 9650 |
| 0B8D 0 C8BA | LOD | DSWCS | PRINT ERROR IN DSW | 80609650 |
| OB8E 0 6108 | LDX | 1 8 | | 80609660 |
| 0B8F 1 4400 0C30 | BSI | L PRDSW 13 PTRAD | | 806096 70 806 0 9680 |
| 0B91 1 67B0 0CBB | + LDX | 15 PIKAU | | 80609690 |
| 0B93 0 0B0E | KEYIN XIO | 3 SEE | READ AGAIN IF CHECK | 80609700 |
| 0B94 0 C037 | LD | KEYCR | | 80609710 |
| 0B95 0 F30C | EDR | 3 KEY | | 80609720 8 060 9730 |
| 0B96 0 1800 0B97 0 C034 | RTE LO | 16 KEYCR | | 80609740 |
| 0B9B 0 D30C | STO | 3 KEY | | 80609750 |
| 0B99 0 1800 | RTE | 16 | | 80609760 |
| OB9A 1 4Ç18 OBA2 | BSC | L WRDCT,&- | BR IF CHARS AGREE | 80609770 |
| 0B9C 0 F02F | EOR | KEYCR | | 806 0 9780 806 0 9790 |
| 0B9D 0 6109 0B9E 1 4400 0C30 | LDX BS I | 1 9 L PRDSW | PRINT ERROR IN READ | 80609190 |
| OBAO 1 6780 OC88 | LOX | I3 PTRAD | THE EMILE TO THE PERSON OF THE | 80609810 |
| | * | | | 80609820 |
| OBA2 0 6600 0000 | WRDCT LDX | L2 /0000 | | 80609830 |
| OBA4 0 61C0 | LDX | 1 -64 | | 80609840 80609850 |
| OBA5 1 C500 OD33 OBA7 O F30C | CNVRT LD EOR | L1 KECUD&64 3 KEY | | 80609860 |
| OBA8 1 4C18 OBCD | BSC | L CMPRE,&- | BR IF CHAR MATCHES | 80609870 |
| OBAA O 7101 | MDX | 1 1 | | 80609880 |
| OBAB O 70F9 | MDX | CNVRT | | 806 0 9890 806 0 99 00 |
| OBAC O C3OC | * LD | 3 KEY | | 806099 10 |
| 0BAO 0 F016 | EOR | NCAP | | 80609920 |
| OBAE 1 4C18 OBC1 | BSC | L NOCP,&- | BR IF NO CAP NEXT | 80609930 |
| 0000 0 0010 | * | W 000B | | 80609940 |
| 0BB0 0 CO19 0BB1 0 F30C | LD EDR | KOOOB 3 KEY | | 80 60 9950 806 0 9960 |
| 0BB2 1 4C18 0C10 | BSC | L ENDM. &- | BR IF END MESG | 806099 7 0 |
| | * | | | 80609980 |
| 0884 0 CO10 | LD | ERSLC | | 80609990 |
| 0BB5 0 F30C 0BB6 1 4C18 0BF7 | EOR BSC | 3 KEY L ERSE,&- | BR IF ERASE LAST CHR | 8 0610 00 0 80 61 001 0 |
| 0880 1 4C10 00 1 | * | E ENSEY4 | DK II EKASE EAST OM | 806 10 020 |
| 0BB8 0 C30C | LD | 3 KEY | | 80610030 |
| 0BB9 0 6105 | LDX | 1 5 | | 80610040 |
| OBBA 1 74FF 0C82 OBBC 1 4400 0C30 | MDX BSI | L EMESG,-1 L PRDSW | | 806 10050 806 10 060 |
| OBBE 1 7401 OCB2 | WOX | L EMESG,1 | | 80 610 0 7 0 |
| OBCO 0 7092 | MDX | SELC2 | | 80610080 |
| | * | | | 80610090 |
| 0BC1 0 6801 | NOCP STX | O LOWER | | 80610100 80610110 |
| 0BC2 0 7090 | MDX | SELC2 | ***** | 80610120 |
| | * | | 20.00 | 80610130 |
| | * | | | 80610140 |
| 0BC3 0 0000 | LOWER DC | /0000 | # O IF NEXT UPR CASE | 8 0610150 8 061016 0 |
| 0BC4 0 0002 0BC5 0 0004 | NCAP DC ERSLC DC | /0002 /0004 | ERASE FIRLD KEY CODE BACKSPACE KEY CODE | 80610170 |
| 0BC6 0 0000 | SLTWD OC | /0004 | KEYBOARD SHIFT WORD | 80610180 |
| OBC7 O FFE7 | KFFE7 DC | -25 | | 80610190 |
| OBC8 0 0000 | ERSEA OC | /0000 | DACK CDACE | 80610200 |
| OBC9 0 1111 | BSPSE DC | /1111 | BACK SPACE | 80610210 |
| | | | | |

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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM

PART NO. 2196366

| 1053/1816 FUNC | TION T | FCT | | , 5 | | 1000 31312 | | PAGE |
|----------------|------------------|--------------|-------|------------|---------|------------------|--|--|
| | | - 31 | | | | | | |
| | 0 0008 | | K0008 | | | /0 008 | | 80610220 |
| | 0 F0 00 | | KF000 | DC | | /F000 | | 80610230 |
| 0 BCC | 0 0000 | | KEYCR | | | /000 0 | | 80610240 |
| | | | | *** | *** | ***** | ********** | 80610250 |
| | | | * | | | 2.40 | | 80610260 |
| | | | * | | | PLACE | CHAR KEYED IN | 80610270 |
| | | | * | | | | OUTPUT TABLE | 80610280 |
| ORCD | 1 C500 | 0073 | CMPRE | 10 | 1.1 | TYCOD&64 | EFTCH DRINTED CHAP | 80610290 |
| | 1 7400 | | CHEKL | MDX | Ĺ | LOWER,0 | FETCH PRINTER CHAR SKIP IF UPPER CASE | 8 06103 00 806 1031 0 |
| | 0 1808 | | | SRA | _ | 8 | SKI II OTTEK CA JE | 80610310 |
| | 0 1008 | | | SLA | | 8 | | 80610330 |
| | 0 D303 | | | STO | 3 | OUT | SAVE OUTPUT CHAR | 80610340 |
| | | | * | | | | | 80610350 |
| | 0 6100 | | | LDX | 1 | 0 | RESET LOWER CASE SW | 80610360 |
| 0 BD 5 | 0 69ED | | | STX | 1 | LOWER | | 80610370 |
| | | | ** | | | | | 80610380 |
| | 1 7400 | OBC6 | | MDX | L | SLTWO,0 | BR IF CHAR IS FIRST | 80610390 |
| 0808 | 0 7004 | | | MDX | | SFT | * TO BE PLACED IN WD | 80610400 |
| 0.000 | 0 (101 | | * | | | | | 80610410 |
| | 0 6121 0 7201 | | NOSFT | | | /0021 | CVID IF TABLE COURT | 80610420 |
| | | | | MDX | 2 | 1 | SKIP IF TABLE COMPLT | 80610430 |
| | 0 7006 | | | MDX MDX | | TBLIS | | 80610440 |
| 0000 | 0 1007 | | * | MDX | | EXIT | | 80610450 |
| OBDD | 0 6100 | | SFT | LDX | 1 | 0 | | 80610460 80610470 |
| | 0 1808 | | 31 1 | SRA | 1 | 8 | | 80610470 |
| | 0 7000 | | | MDX | | TBLIZ | | 80610490 |
| | | | * | | | 10212 | | 80610500 |
| 0BE 0 | 1 EE00 | oCB1 | TBLIZ | OR | L2 | ANY&27 | PLACE CHAR IN OUTPUT | 80610510 |
| 0BE2 | 1 D600 | 0 C B 1 | TBLIS | STO | | | * TABLE | 80610520 |
| | | | * | | | | | 80610530 |
| | 0 69E1 | | TBLI | STX | 1 | SLTWO | SAVE TEST STATUS | 80610540 |
| | O 6ABD | | | STX | 2 | WRDCT&1 | | 80610550 |
| | 1 C400 | 0 C89 | EXIT | LD | L | KE000 | | 80610560 |
| | 0 D302 | | | STO | 3 | STS | UPDATE PRTR STATUS | 806 10 5 7 0 |
| | 0 10A0 | | | SLT | _ | 32 | 65405 | 80610580 |
| | 0 0B0A 1 4C20 | 0.45.4 | | 01 X | _ | PTR | SENSE - RESET DSW | 80610590 |
| OBEB | 1 4020 | UAFA | * | BSC | L | RYDER,Z | BR IF NDT READY | 80610600 |
| ORED | 0 0 B08 | | T | ΧID | , | WRT | DRINT ONE CHAP | 80610610 |
| | 0 0B0A | | | XIO | | PTR | PRINT ONE CHAR SENSE - RESET DSW | 80610620 |
| | 1 0400 | 0842 | | STO | Ĺ | DSWBY | SENSE - RESET DSW | 80 610 630 8 061 0640 |
| | 1 F400 | | | EOR | Ĺ | KOCOO | | 80610650 |
| OBF3 | 1 4020 | 0B3A | | BSC | Ĺ | BSYER,Z | BR IF NOT BUSY | 80610660 |
| OBF5 | 1 4C00 | OAEF | | BSC | Ĺ | MARKX | CONTINUE TILL INTRPT | 80610670 |
| | | | **** | **** | * * * * | | ******* | 80610680 |
| | | | * | | | | | 80610690 |
| | | | * | | | ERASE | LAST CHARACTER | 80610700 |
| | | | * | | | | KEYED IN | 80610710 |
| | | | * | | | | | 80610720 |
| | 0 6AD0 | | ERSE | STX | 2 | ERSEA | | 80610730 |
| | O COCF | | | LD | | ERSEA | | 80610740 |
| | 0 F0CD | 0053 | | EOR | | KFFE7 | 0.5 . 5 . 5 . 5 . 5 . 5 . 5 . 5 . 5 . 5 | 80610750 |
| UBFA | 1 4C18 | 0853 | * | BSC | L | SELC2,&- | BR IF TABLE EMPTY | 80610760 |
| OBEC | 0 COC9 | | * | | | CLTUO | | 80610770 |
| | 1 4020 | 0007 | | LD BSC | L | SLTWO ERSE1,Z | DD TE NOT CHIETCH | 80610780 |
| | 0 6121 | 0001 | | LDX | | /0021 | BR IF NOT SHIFTED | 80610790 |
| | 1 C600 | OCB1 | | LD | | ANY&27 | ERASE SHIFTED CHAR | 806 1 0800 806 10 810 |
| | 0 1808 | J = 13 = | | SRA | - 4 | 8 | | 80610820 |
| | 0 1008 | | | SLA | | 8 | | 80610820 |
| | 1 0600 | OCB1 | | STO | L2 | ANY&27 | | 80610840 |
| | 0 7006 | _ | | MDX | | ERSE2 | | 806 10 850 |
| | | | * | | | | | 80610860 |
| OC 07 | 0 1010 | | ERSE1 | SLA | | 16 | | 80610870 |
| | 0 6100 | | | LDX | 1 | | | 80610880 |
| | 0 72FF | | | MDX | | -1 | | 80610890 |
| | | | | | | | | |

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PRUG ID 0806-I

PA GE

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| • | | . 31 | | | | | | |
| OCOA O | | | | NOP | | | | 80610900 |
| 0C0B 1 | | OCB2 | 50653 | STO | L2 | ANY&28 | CET BACKERACE CODE | 80610910 |
| 0C0D 0 | | | ERSE2 | | - | BSPSE | SET BACKSPACE CODE | 80610920 |
| 0C0E 0 0C0F 0 | | | | STO | 2 | OUT | * IN OUTPUT WORD | 80610930 |
| OCOF 0 | 7004 | | **** | MDX | 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | TBLI | ***** | 80610940 80610950 |
| | | | * | | | | | 80610960 |
| | | | * | | | TERM | MINATE MESSAGE ROUTINE | 80610970 |
| | | | * | | | | | 80610980 |
| OC 10 1 | C400 | 0C99 | ENDM | LÐ | Ł | E3YNA | | 80610990 |
| OC12 1 | 6680 | OBA3 | | LDX | 12 | WRDCT&1 | | 80611000 |
| 0C14 1 | | 0C25 | | BSC | L | | BR IF TABLE EMPTY | 80611010 |
| 0C16 0 | | | | LD | | SLTWD | | 80611020 |
| 0C17 1 | | | | BSC | | ENDM1,&- | BR IF LAST SHIFTEO | 80611030 |
| 0C19 1 | | | | OR | | ANY&27 | | 80611040 |
| OC1B 1 | 0600 | OCBI | * | STO | L4 | ANY&27 | | 80611050 |
| 0C1D 1 | 6400 | 0083 | ENDM1 | I D | L | RED1 | SET TABLE TERMINATOR | 80611060 80611070 |
| 0C1F 1 | | | LINDINI | STO | | ANY&28 | SET TABLE TERMINATOR | 80611070 |
| 0021 0 | | 3002 | | LD | LE | FUND | | 80611080 |
| 0C22 1 | | oCB3 | | STO | L2 | ANY&29 | | 80611100 |
| 0C24 0 | | | | MDX | | ENDM3 | | 80611110 |
| | | | * | | | | | 80611120 |
| 0C25 0 | | | ENDM2 | | | FUN0 | SET TABLE TERMINATOR | 80611130 |
| 0C26 0 | D 071 | | | STO | | ANY&2 | | 80611140 |
| | | | * | | | | | 80611150 |
| 0027 0 | | | ENDM3 | | _ | K0008 | RESTORE PTR RTN | 80611160 |
| 0C28 0 | 0302 | | .4. | STO | 3 | STS | | 80611170 |
| | | | * | | | | | 80611180 |
| 0029 0 | 4200 | | r | LDX | 2 | 0 | | 80611190 80611200 |
| 0C2A 1 | | 0114 | | STX | | RSADR&1 | | 80611210 |
| 0C2C 1 | | | | STX | | SW1 | | 80611220 |
| | | | * | • • • • | | • | | 80611230 |
| 0C2E 1 | 4C00 | OAE2 | | BSC | L | MARKK | RESTART PRINTER | 80611240 |
| | | | **** | **** | *** | ***** | ********* | 80611250 |
| | | | * | | | | | 80611260 |
| | | | * | | | PRIN | IT ERROR ROUTINE | 80611270 |
| 0C30 0 | 0000 | | # Prdsw | DC | | 10000 | u e | 80611280 |
| 0030 0 | 0000 | | * | UC | | /0000 | ME | 80611290 80611300 |
| 0C31 0 | D854 | | • | STD | | EMESG&4 | SAVE DATA WAS & S/B | 80611310 |
| 0032 0 | | | | STX | 1 | EMESG&2 | SAVE MESSAGE NUMBER | 80611320 |
| 0C33 0 | | | | LD | | EMESG&2 | | 80611330 |
| 0C34 0 | E854 | | | OR | | KE000 | | 80611340 |
| OC 35 O | D04E | | | STO | | EMESG&2 | | 80611350 |
| | | | * | | | | | 80611360 |
| 0C36 0 | | | | STX | | PTRAD | SET UP MESG ID NO | 80611370 |
| 0037 0 | | | | LD | 3 | PTR | | 80611380 |
| 0038 0 | | | | SLA | | 8 | | 80611390 |
| 0C39 0 0C3A 0 | | | | SRA STO | | 8 8 | | 80611400 |
| UC3A U | DUMA | | * | 310 | | EMESG&3 | | 80611410 8061142 0 |
| 0C3B 0 | (201 | | T | LD | 2 | RTN | FETCH RTN NO | 80611420 |
| 0C3C 1 | | 0800 | | STO | L | RID | TETOT KIN NU | 80611440 |
| 0050 1 | 2 .00 | 5000 | * | 510 | - | | | 80611440 |
| OC3E 1 | C400 | 0803 | • | LD | L | SW1 | | 80611460 |
| 0C40 1 | | | | AND | Ĺ | BASIC | REMOVE BAD BITS | 80611470 |
| 0C42 1 | | | | CMP | Ĺ | ELVEN | BR IF ROUTINE ELEVEN | 80611480 |
| 0C44 0 | | | | NOP | - | | | 80611490 |
| 0C45 0 | | | | MDX | | ERDLY | | 80611500 |
| | | | * | | | | | 80611510 |
| 0C46 1 | D400 | 0800 | | STO | L | RID | SET ROUTINE NO | 80611520 |
| | | | * | | | | - | 80611530 |
| 0C48 1 | | 0B47 | ERDLY | | L | F0200 | SET UP DELAY COUNTER | 80611540 |
| 0C4A 0 | | 0544 | 0.51.011 | STO | | TIMEX | | 80611550 |
| 0C4B 1 0C4D 0 | | OEAA | RELCK | | L | PTROESTS | | 80611560 |
| | FO38 | | | EOR | | KE000 | | 806 1157 0 |

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| IBM MAINTENANCE DIAGNOSTIC | PROGRAM FOR | THE | 1800 SYSTE | М | PART (40) - 2196366 | 5 |
|--------------------------------------|----------------------|--------------------|----------------|---|-------------------------------|---|
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| OC4E 0 4818 | BSC | | -3 | 8R IF WAIT FOR INT | 80611580 | |
| 0C4F 0 C02E | LD | | PDSWX | | 80611590 | |
| 0C50 0 1004 | SLA | | 4 | | 80611600 | |
| 0C51 1 4C10 0C56 | BSC | L | CXREL,- | BR IF INTRPT RECD | 80611610 | |
| OC53 1 74FF OC8A | MDX | | TIMEX,-1 | FALL THRU IF TIME UP | 80611620 | |
| 0055 0 7023 | MDX | | TIMEL | | 80611630 | |
| OC56 1 C400 0811 | CXREL LD | L | DOEF0 | | 80611640 | |
| 0C58 1 4C10 0C5E | BSC | | ERDSW,- | BR IF PTR O RELEASED | 89611650 | |
| OC5A 0 4480 0132 | BSI | | RELOV | an a | 80611660 | |
| | DC | | DDEFO | * | 80611670 | |
| 0C5C 1 0811 0C5D 1 080A | DC | | TERM | * | 80611680 80611690 | |
| 0000 1 0000 | | **** | | ****** | 80611700 | |
| OC5E 0 4480 0130 | ERDSW BSI | I | ERROR | * | SC 80611710 | |
| 0C60 1 0C82 | PC | | EMESG | MESSAGE ADDR * | 80611720 | |
| OC61 1 OC7C | DC | | CKDSX | BUSY RETURN ADDR * | 80611730 | |
| OC62 1 0C63 | DC | | FRLOP | LOOP ON ERROR ADDR * | 80611740 | |
| | | | | ***** | 80611750 | |
| 0063 1 6500 0066 | FRLOP LDX | | ERDUO | EVIT TO HOUTTON | 80611760 | |
| 0065 0 7018 | MDX | | POSWX | EXIT TO MONITOR | 80611770 | |
| 0C66 1 6580 0C30 0C68 1 C400 0811 | ERDOO LDX LD | L | PROSW DDEFO | RETURN TO TPR PROG | 80611780 30611 7 90 | |
| 0068 1 6400 0811 0068 1 4018 007E | BSC | | PDSWX,&- | BR IF NO PTR ZERO | 80611800 | |
| 000A 1 4018 007E | | | | ******** | 80611810 | |
| 0C6C 1 7401 081C | MOX | | INTSW,1 | SET INTR SW | 80611820 | |
| OC6E 0 1000 | NOP | | , - | 52. 1 , 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, | 80611830 | |
| OC6F 0 4480 0131 | ERGET BSI | | REQDV | REQ MON LOG DEV * | 80611840 | |
| 0C71 1 0C76 | DC | | ERBUY | BUSY RETURN * | 80611850 | |
| 0C72 1 0811 | DC | | 0DE F0 | 冰 | 80611860 | |
| 0C73 1 081D | DC | | DVAO | * | 80611870 | |
| OC74 1 080A | DC | | TERM | * | 80611880 | |
| 0075 0 7009 | | 3/4 3/4 3/4 3/4 3/ | | *********** | 80611890 | |
| 0C75 0 7008 | X GM * | | PDSWX | | 80611900 | |
| 0076 1 6500 0066 | ERBUY LDX | . 1 | ER000 | TRY AGAIN - LATER | 80611910 80611920 | |
| 0C78 0 7005 | MDX | | POS₩X | INT AGAIN - LATER | 80611930 | |
| | * | | | | 80611940 | |
| OC79 1 6500 OC4B | TIME1 LDX | L.1 | RELCK | | 80611950 | |
| OC7B 0 7002 | MOX | | PDSWX | | 80611960 | |
| | * | | | | 806 11970 | |
| 0C7C 1 6500 0C5E | CKDSX LDX | | ERDSW | BUSY RETURN TO CALL | 80611980 | |
| 0C7E 1 6D00 0809 | POSWX STX | | MLSCF | | 80611990 | |
| 0C80 0 4C80 0120 | 880 | I | START | | MX 80612000 | |
| 0082 0000 | * BSS | Е | 0 | | 80612010 80612020 | |
| 0C82 0 0003 | EMESG DC | L | 3 | WORD COUNT | 80612030 | |
| 0C83 0 0000 | DC | | /0000 | HEX OUTPUT | 80612040 | |
| 0C84 0 0000 | DC | | /0000 | MESSAGE IO NO | 80612050 | |
| 0085 0 0000 | DC | | /0000 | PRINTER NUMBER | 80612060 | |
| 0086 0 0000 | DC | | /0000 | OSWAS | 80612070 | |
| 0087 0 0000 | DC | | /0000 | DSW S/B | 80 612080 | |
| | * | | | | 80612090 | |
| 0000 0 0000 | * | | 10000 | 00111750 4000 | 80612100 | |
| 0088 0 0000 | PTRAO OC | | /0000 | PRINTER ADRS | 80612110 | |
| 0C89 0 E000 0C8A 0 0000 | KEOOO DC TIMEX DC | | /E000 /0000 | ERROR ID | 80612120 | |
| 0C8A 0 0000 | | **** | | DELAY TIME STORAGE | 80612130 80612140 | |
| | * | | | | 80612150 | |
| | * | | PRINT | ER TEST SEQUENCE | 80612160 | |
| | * | | | CONTROL TABLE | 80612170 | |
| | * | | | | 80612180 | |
| OC88 1 OC96 | FUNR DC | | ANY | KEYBUARD OPTION | 80612190 | |
| 0080 1 0073 | DC | | TACAR | TA8 & CARRIER RETURN | 80612200 | |
| 0C8D 1 0085 | DC | | UCASE | UPPER CASE CHARS | 80612210 | |
| OC8E 1 ODA2 | OC. | | LCASE | LOWER CASE CHARS | 80612220 | |
| 0C8F 1 0D8F | DC | | COLOR | COLOR SHIFT ROUTINE | 80612230 | |
| 0C90 1 0DD5 0C91 1 0DF4 | DC DC | | SPNDX | BACKSPACE AND INDEX | 80612240 | |
| 0091 1 UUF4 | UC | | AUCAR | AUTO CARRIER RETURN | 80612250 | |
| | | | | | | |

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1053/1816 FUNCTION TEST

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| 0C92 1 0E00 | DC | ROCK | TEST TILT | | 80612260 | |
|--------------------------------------|-----------------|-------------------------|--|---------|----------------------|--------|
| 0C93 1 0E40 | OC | ROLL | TEST ROTATE | | 80612270 | |
| 0C94 1 0E73 | DC | TWIST | TEST TILT AND RO | TATE | 80612280 | |
| 0C95 0 FFFF | FUNO DC | /FFFF | TEST TIET AND RO | * | 80612290 | |
| 0C93 0 FFTT | · · · · · | | ****** | • | | |
| | * | **** | * ^ ^ * * * * * * * * * * * * * * * * * * * | ~ ~ ~ ~ | 80612300 | |
| | * | νF | VOOLDO COTION TABLE | | 80612310 80612320 | |
| | | NE | YBOARD OPTION TABLE | | | |
| 2004 2 2021 | * | , | TTCNT | | 80612330 | |
| 0096 0 0001 | ANY OC | 1 | ITCNT | | 80612340 | |
| 0C97 0 05FF | DC | /05FF | BLACK | | 80612350 | |
| OC9B O FFFF | OC. | /FFFF | ITCNT | | 80612360 | |
| 0C99 0 0000 | DC | /0 0 00 | | | 80612370 | |
| OC9A O 0000 | DC | /0000 | | | 80612380 | |
| 0C9 B 0 0 0 00 | DC | /00 0 0 | | | 80612390 | |
| 0 C9C 0 00 00 | OC | /000 0 | | | 80612400 | |
| 0C90 0 0 000 | OC | /000 0 | | | 80612410 | |
| OC9E 0 0000 | oC | /0 000 | | | 80612420 | |
| OC9F 0 0000 | DC | /00 0 0 | | | 80612430 | |
| OCAO O 0000 | OC. | /00 0 0 | | | 80612440 | |
| OCA1 0 0000 | DC | /0 00 0 | | | 80612450 | |
| OCA2 0 0000 | OC | /0000 | | | 80612460 | |
| OCA3 0 0000 | 0 C | /0000 | | | 80612470 | |
| OCA4 0 0000 | DC | /0000 | | | 80612480 | |
| OCA5 0 0000 | DC | /0000 | | | 80612490 | |
| OCA6 0 0000 | OC | /0000 | | | 80612500 | |
| 0CA7 0 0000 | DC | /0000 | | | 80612510 | |
| OCAB 0 0000 | DC | /000 0 | | | 80612520 | |
| 0CA9 0 0000 | ĎČ | /0000 | | | 80612530 | |
| OCAA O 0000 | OC. | /0000 | | | 80612540 | |
| OCAB 0 0000 | DČ | /0000 | | | 80612550 | |
| OCAC 0 0000 | DC | /0 000 | | | 80612560 | |
| OCAD 0 0000 | DC | /00 0 0 | | | 80612570 | |
| OCAE 0 0000 | oc oc | /0000 | | | 80612580 | |
| OCAF 0 0000 | ÕČ | /0000 | | | 80612590 | |
| OCBO O 0000 | DC | / 0 000 | | | 80612600 | |
| OCB1 0 0000 | DČ | / 0 0 0 0 | | | 80612610 | |
| OCB2 O FFFF | DC | /FFFF | | | 80612620 | |
| 0002 0 1111 | | | ******* | *** | 80612630 | |
| | * | | | | 80612640 | |
| | * | | | | 80612650 | |
| | * | FN | D PROGRAM ROUTINE | | 80612660 | |
| | * | ٠., | | | 80612670 | |
| OCB3 O CO44 | TYEND LD | KEC 00& 5 | SET UP DELAY COU | INTER | 80612680 | |
| OCB4 O DOD5 | STO | TIMEX | | | 80612690 | |
| 000. 0 2002 | * | | | | 80612700 | |
| OCB5 1 6500 OCB5 | AWAIT LDX | L1 AWAIT | SET RETURN ADORE | SS | 80612710 | |
| OCB7 1 74FF OC8A | MDX | L TIMEX,- | 1 DECREMENT COUNTE | R | 80612720 | |
| 0CB9 0 70C4 | MOX | POSWX | 1 DECKEMENT COOMIC | | 80612730 | |
| 0009 0 1004 | * | . 03 117 | | | 80612740 | |
| | | ***** | **** | **** | 80612750 | |
| OCBA 0 4C80 012E | BSC | I END | | * SC | 80612760 | |
| 000A 0 4000 012L | | | ******* | | 80612770 | |
| | * | | | | 80612780 | |
| | * | | | | 80612790 | |
| OCBC O 0000 | TEND DC | /0000 | | | 80612800 | |
| OCBD 0 1010 | SLA | 16 | | | 80612810 | |
| OCBE 1 0400 0803 | STO | L SW1 | | | 80612820 | |
| OCCO O 6500 FFFF | LDX | L1 -1 | RESET KEYIN OPTI | DN | 80612830 | |
| 0CC2 0 6905 | STX | 1 ANY&2 | NEGET NETTING | | 80612840 | |
| 0002 0 8903 | ≯ | 1 MIVIUZ | | | 80612850 | |
| OCC3 0 6101 | LDX | 1 1 | | | 80612860 | |
| | STX | L1 RSAOR&1 | | | 80612870 | |
| 0CC4 1 6D00 0AA4 0CC6 1 6700 0F38 | LDX | L3 PTR8 | RESTORE PTRS REST | TAAT | 80612880 | |
| 0CC8 0 6109 | LDX | 1 9 | RESTORE LINS REST | ANI | 80612890 | |
| | | | | | 80612900 | |
| OCC9 1 C400 08F6 OCCB 0 D301 | TENO1 LD STO | L II 3 RTN | | | 80612910 | |
| | | | | | 80612920 | |
| 0CCC 1 C400 0C8C | LD | L FUNR&1 | | | 80612930 | |
| OCCE 0 0300 | STO | 3 ADR | | | 00012730 | |
| | | | | | | |
| | | | | | | |
| 2055044 - 02114111 | 07.444. | 0100747 | 17 HM/ 0 1/1/20/ | 2044072 | PD 0 0 * 5 | 0001 |
| 2BFEB66 01MAY66 | 27JUN66 | 010CT67 | 17JUN68 14NOV69 | 20MAR70 | PROG ID | 0806-1 |
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| 1053/18 | 16 FUNCTION | TEST | | | | | | | | |
| | 0CCF 1 C40 | 0.0074 | LD | . L | TACAR& | .1 | | | 80612940 | |
| | OCD1 0 D30 | | \$1 | | DUT | - | | | 80612950 | |
| | 0CD2 0 COC | | LD | | ANY | | | | 80612960 | |
| | OCD3 0 D30 | 4 | S1 | 0 3 | ITR | | | | B0612970 | |
| | OCD4 0 D30 | | \$1 | 0 3 | SLT | | | | 80612980 | |
| | OCD5 0 180 | | SP | | 1 | | | | 806129 9 0 | |
| | 0006 0 D30 | | S1 | _ | NOS | | | | 80613000 | |
| | 0CD7 0 030 | | S1 | | PAO | | | • | 80613010 | |
| | OCD8 0 73E | | ME | | -18 | | | | 80613020 | |
| | OCD9 0 71F | | ME | | -1 -1 | | | | 80613030 | |
| | OCDA 0 70E | E | MC | | TEN01 | alle alle alle alle alle alle alle alle | ***** | le ale ale ale ale ale | 80613040 | |
| | OCOB 0 448 | 0.0132 | BS | | RELOV | | ASE ALL PT | | 80613050 8 0 613060 | |
| | 0C00 0 700 | | TENO3 ME | | TEND2 | NC L C | ASC ALL FIR | * | 80613070 | |
| | OCDE 0 700 | | ME | | TEND2 | | | * | 80613070 | |
| | 0CDF 0 700 | | ME | | TEND2 | | | 本 | 80613090 | |
| | OCEO 0 700 | | MC | | TEND2 | | | * | 80613100 | |
| | OCE1 0 700 | | ME | X | TEND2 | | | * | 80613110 | |
| | OCE2 0 700 | 6 | MC | X | TEND2 | | i | * | 80613120 | |
| | OCE3 0 700 | 5 | MC | X | TEND2 | | | * | 80613130 | |
| | OCE4 0 700 | | MC | | TEN02 | | | * | 80613140 | |
| | OCE5 0 700 | | MC | X | TEND2 | | | * | 80613150 | |
| | OCE6 0 700 | | ME | | TEND2 | | | * | 80613160 | |
| | OCE7 0 700 | | ME | | TENDS | | | * | 80613170 | |
| | OCE8 1 080 | Α | DO | | TERM | | | * | 80613180 | |
| | | | | ***** | ***** | ******* | **** | **** | 80613190 | |
| | OCE9 1 C40 | 0.0010 | * TEND2 LE | | DDEEX | C = T | SAVED DDEF | | 80613200 | |
| | OCEB 1 D40 | | | | | | D RESTORE : | CHO | 80613210 | |
| | OCED 1 040 | | \$ 1 L.r | | DDEE0 SWSTG | * AN | J RESTURE . | 5WZ | 80613220 80613230 | |
| | OCEF 1 D40 | | \$1 | | SW2 | | | | 80613240 | |
| | OCE 1 1 4C8 | | B.9 | | TEND | | | | 80613250 | |
| | 0001 1 700 | 0 001/0 | | | | ***** | ******** | **** | 80613260 | |
| | | | * | | | | | | 80613270 | |
| | | | * | | K | FYBOARD CO | DDE TABLE | | 80613280 | |
| | | | * | | | | | | 80613290 | |
| | OCF3 0 422 | | KECOD DO | ; | /4220 | * | | | 80613300 | |
| | OCF4 0 300 | | D(| | /3000 | / | | | 80613310 | |
| | OCF5 0 200 | | DC | | /2000 | 0 | | | 80613320 | |
| | OCF6 0 100 | | DO | | /1000 | 1 | | | 806 I 3330 | |
| | OCF7 0 080 | | × D(| | /0800 | 2 | | | 80613340 | |
| | OCF8 0 040 | | 0.0 | | /0400 | 3 | | | 80613350 | |
| | 0CF9 0 020 0CFA 0 010 | | 00 | | /0200 /0100 | 4 | | | 80613360 | |
| | OCFB 0 008 | | D() | | /0100 | 5 6 | | | 80613370 | |
| | 0CFC 0 004 | | DO DO | | /0040 | 7 | | | 80613380 80613390 | |
| | OCFD 0 002 | - | D(| | /0020 | 8 | | | 80613400 | |
| | OCFE 0 001 | | DC | | /0010 | 9 | | | 80613410 | |
| | OCFF 0 442 | | DO | | /4420 | \$ | | | 80613420 | |
| | 0D00 0 842 | 20 | DO | | /8420 | • | | | 80613430 | |
| | ODO1 0 242 | 20 | DO. | , | /2420 | • | | | 80613440 | |
| | 0D02 0 00A | 10 | D(| ; | /0 0 A0 | # | | | 80613450 | |
| | 0D03 0 012 | | DO | ; | /0120 | a | | | 80613460 | |
| | 0D04 0 812 | 20 | DO | ; | /8120 | % | | | 80613470 | |
| | 0005 0 412 | | DO | 2 | /4120 | | | | 80613480 | |
| | 0006 0 807 | | Ð | | /80A0 | 3 | | | 80613490 | |
| | 0007 0 400 | | D | | /4000 | | | | 80613500 | |
| | 0D08 0 863 | | DO | | /8820 | | SIGN | | 80613510 | |
| | 0D09 0 822 | | Do | | /8220 | _ | THAN | | 80613520 | |
| | 0D0A 0 806 | | DO | | /8060 | | CAL OR | | 80613530 | |
| | 0D0B 0 800 | | D(| | /8000 | AND | A THAT TON | | 80613540 | |
| | 0D0C 0 487 | | D(| | /4820 /40 A 0 | | AIMATION COLUN | | 80613550 | |
| | 0D0E 0 40 | | () () | | /40A0 | | CAL NOT | | 80613560 80613570 | |
| | 0D0F 0 222 | | D | | /2220 | PER | | | 80613580 | |
| | 0D10 0 212 | | Di | | /2120 | | RSCORE | | 80613590 | |
| | OD11 0 20 | | Ď | | /20A0 | | TER THAN | | 80613600 | |
| | 0012 0 206 | | Di | | /2060 | | TION MARK | | 80613610 | |
| | | • | | | | | | | | |
| | 00555 | | | | | | = | | | |
| DATE EC NO. | 28FEB66 415120 | 01MAY66 415I20A | 27JUN66 415178 | | LOCT67 L1875 | 17JUN68 411939 | 14NOV69 431319 | 20MAR70 431320 | PROG ID PAGE | 0806 1 |

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|----------------------------|---------------|---------------------------------|---------------------|--|------------------------------------|------------------|------------------------|----------------------|--|
| 1053/1816 FUNCTION TEST | | | | | 1053/1816 FUNCTION TEST | | | | 1702 |
| 0013 0 0820 | DC | /0820 | COLON | 80613620 | 0D54 0 C0C0 | DC | /C0C0 | NUMBERS | 80/1/200 |
| 0D14 0 0420 | DC | /0420 | NUMBERS | 80613630 | 0 055 0 0404 | DC | /0404 | AT | 80614300 80614310 |
| 0D15 0 0220 | DC | /0220 | AT | 80613640 | 0D56 0 E2E2 | DC | /E2E2 | QUOTE | 80614320 |
| 0D16 0 0060 | DC | /0060 | QUOTF | 80613650 | 0057 0 3C3F | DC | /3C3E | A | 80614330 |
| 0D17 0 9000 | DC DC | /9000 | A | 80613660 | OD58 0 181A | DC | /181A | В | 80614340 |
| OD18 0 8800 OD19 0 8400 | DC | /8800 /8400 | C B | 80613670 80613680 | OD59 O 1C1E | DC | /1C1E | С | 80614350 |
| 0D1A 0 8200 | DC | /8200 | Ď | 80613690 | 005A 0 3032 | DC | /3032 | D | 80614360 |
| OD1B 0 8100 | DC | /8100 | E | 80613700 | 0D5B 0 3436 0D5C 0 1012 | DC | /3436 | E | 80614370 |
| OD1C 0 8080 | DC | /B080 | F | 80613710 | 0D5D 0 1416 | DC DC | /1012 /1416 | F G | 80614380 . 80614390 |
| OD1D 0 8040 | DÇ | /8040 | G | 80613720 | OD5E 0 2426 | DC | /2426 | н | 80614400 |
| 0D1E 0 8020 | DC | /8020 | H | 80613730 | 0D5F 0 2022 | DC | /2022 | Ĭ | 80614410 |
| 0D1F 0 B010 | DC | /8010 | 1 | 80613740 | 0D60 0 7C7E | DC | /7C7F | J | 80614420 |
| 0D20 0 5000 0D21 0 4800 | DC DC | /50 0 0 / 4800 | J J | 80613750 80613760 | 0D61 0 585A | DC | /585A | К | 80614430 |
| 0D21 0 4800 0D22 0 4400 | DC | /4400 | Î. | 80613770 | 0D62 0 5C5E | DC | /5C5F | Ë | 80614440 |
| 0D23 0 4200 | DC | /4200 | M | 80613780 | 0063 0 7072 | DC | /7072 | M | 80614450 |
| 0D24 0 4100 | DC | /4100 | N | 80613790 | 0D64 0 7476 0D65 0 5052 | DC DC | /7476 /5052 | N O | 80614460 |
| 0D25 0 4080 | DC | /4080 | 0 | 80613800 | 0D66 0 5456 | DC | /5456 | D D | 80614470 80614480 |
| 0D26 0 4040 | DC | /4040 | Р | 80613810 | 0D67 0 6466 | DC | /6466 | Ω | 80614490 |
| 0D27 0 4020 | DC | /4020 | Q | 80613820 80613830 | 0068 0 6062 | DČ | /6062 | Ř | 80614500 |
| 0D28 0 4010 | DC | /4010 /2B00 | K C | 80613830 80613840 | OD69 0 989A | DC | /989A | S | 80614510 |
| 0D29 0 2800 0D2A 0 2400 | DC DC | /2800 /2400 | 3 T | 80613850 | 0D6A 0 9C9E | OC | /9C9E | T | 80614520 |
| 0D2B 0 2200 | DC | /2200 | i | 80613860 | 0D6B 0 B0B2 | DC | /B0B2 | U | 80614530 |
| OD2C 0 2100 | DC | /2100 | v | 80613870 | 0D6C 0 B4B6 | DC | /B4B6 | V | 80614540 |
| 0D2D 0 2080 | DC | /2080 | W | 80613880 | 0060 0 9092 | DC | /9092 | W | 80614550 |
| 0D2E 0 2040 | DC | /2040 | X | 80613890 | 0D6E 0 9496 0D6F 0 A4A6 | DC DC | /9496 /A4A6 | X Y | 80 614560 806 145 70 |
| 0D2F 0 2020 | DC | /2020 | Y | 80613900 | 0D70 0 A0A2 | DC | /A0A2 | 7 | 80614570 |
| 0D30 0 2010 | DC | /2010 | Z | 80613910 | 0071 0 2121 | DC | /2121 | SPACE | 80614580 |
| 0D31 0 0000 | DC | /0000 | SPACE | 80613920 | 0 D72 0 0303 | DC | /0303 | LINE FFED | 80614600 |
| 0D32 0 2820 | DC * | /2820 | 0 - 8 - 2 | 80613930 | | * | | | 80614610 |
| | * | ומ | RINTER CODE TABLE | 80613940 80613950 | | * | | | 80614620 |
| | * | F 1 | KINTER CODE TABLE | 80613960 | | * | TAR | 3 AND CARRIER RETURN | 80614630 |
| 0D33 0 D6D6 | TYCOD DC | /D6D6 | * | 80613970 | OD73 0 0001 | * TACAR DC | 1 | ITCAIT | 80614640 |
| OD34 O BCBC | DC | /BCBC | / | 80613980 | 0D74 0 2181 | DC DC | /2181 | ITCNT SP CR | 8 061 4650 80614660 |
| 0D35 0 C4C4 | DC | /C4C4 | 0 | 80613990 | 0D75 0 05FF | DC | /05FF | BLACK | 80614670 |
| OD36 O FCFC | DC | /FCFC | 1 | 80614000 | 0D76 0 0002 | DC | 2 | ITCNT | 80614680 |
| 0D37 0 D8DB | DC | /D8D8 | 2 | 80614010 | ΟD77 Ο 811E | DC | /811E | CR C | 80614690 |
| 0D38 0 DCDC | DC | /DCDC /F0F0 | 3 | 80614020 80614030 | 0D78 0 3C60 | DC | /3060 | A R | 80614700 |
| 0D39 0 F0F0 0D3A 0 F4F4 | DC DC | /F4F4 | 5 | 80614040 | 0D79 0 6020 | DC | /6 02 0 | R I | 80614710 |
| OD3B O DODO | DC | /D0D0 | 6 | 80614050 | 0D7A 0 3460 | DC | /3460 | E R | 80614720 |
| 0D3C 0 D4D4 | DC | /D4D4 | 7 | 80614060 | 0D7B 0 2160 0 D7C 0 349C | DC | /2160 | R | 80614730 |
| 0D3D 0 E4E4 | DC | /E4E4 | 8 | 80614070 | 0070 0 3490 0070 0 8060 | D C DC | /349C /B06 0 | E T U R | 80614740 80614750 |
| OD3E O EOEO | DC | /E0E0 | 9 | 80614080 | 0D7E 0 7441 | DC | /7441 | N TAB | 80614760 |
| 0D3F 0 4040 | DC | /4040 | \$ | 80614090 | 0D7F 0 9E3C | DC | /9E3C | T A | 80614770 |
| 0040 0 0000 | DC | /0000 | • | 80614100 | 0 D80 0 18 B0 | DC | /18BO | вυ | 80614780 |
| 0D41 0 80B0 | DC DC | /8080 / 6 363 | † 4 | 80614110 8 06141 20 | 0D81 0 5C3C | DC | /5C3C | L A | 80614790 |
| 0D42 0 C2C2 0D43 0 E6E6 | DC | /C2C2 /E6E6 | * a | 80614130 | 0D82 0 9C34 | DC | /9034 | T E | 80614800 |
| OD44 O FEFE | DC | /FEFE | % | 80614140 | 0083 0 09FF | RED1 DC | /09FF | RED | 80614810 |
| 0D45 0 F6F6 | DC | /F6F6 | Ci Ci | 80614150 | 0084 0 FFFF | DC * | /FFFF | | 80614820 |
| OD46 O DADA | DC | /DADA | 3 | 80614160 | | * | | | 80614830 |
| OD47 0 8484 | DC | /8484 | - | 80614170 | | * | CH | ARACTER COMPLIMENT | 80 6148 40 80 614 85 0 |
| 0D48 0 0202 | DC | /0202 | CFNTS SIGN | 80614180 | | * | Citi | ARACTER COMETMENT | 80614860 |
| OD49 O DEDE | DC | /DEDE | LESS THAN | 80614190 | | * | | | 80614870 |
| 0D4A 0 C6C6 | DC | /0606 | LOGICAL OR | 80614200 | | * | | | 80614880 |
| 0D4B 0 4444 | DC DC | /4444 /42 4 2 | AND EXCLAIMATION | 8061 421 0 8061 4 220 | 0D85 0 0001 | UCASE DC | 1 | ITCNT | 80614890 |
| 0D4C 0 4242 0D4D 0 D2D2 | DC | /D2D2 | SEMI COLON | 80614220 | 0D86 0 2181 | DC | /2181 | SP CR | 80614900 |
| 0D4F 0 F2F2 | DC | /F2F2 | LOGICAL NOT | 80614240 | 0D87 0 05FF | DC | /05fF | BLACK | 80614910 |
| 0D4F 0 0606 | DC | /0606 | PERCENT SIGN | 80614250 | 0088 | 9C | 2 /813E | ITCNT | 30614920 80414930 |
| OD50 O BEBE | DC | /BEBE | UNDERSCORE | 80614260 | 0084 0 1A1E | DC DC | /813E /1A1E | CR A B C | 80614930 |
| 0051 0 4646 | DC | /4646 | GREATER THAN | 80614270 | 0D8B 0 3236 | DC | /3236 | D E | ძ0614940 80614950 |
| 0D52 0 8686 | DC | /8686 | QUESTION MARK | 80614280 | 0D8C 0 1216 | DC | /1216 | F G | 80614960 |
| 0D53 0 8282 | DC | /8282 | COLON | 806 14 290 | OD8D 0 2622 | DC | /2622 | H I | 80614970 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| DATE 28FEB66 01MA | | 0100167 | 17JUN68 14NOV69 | 20MAR70 PROG ID 0806-1 | DATE 28FEB66 01MAY66 | 27JUN66 | 010CT67 | 17JUN68 14NAV69 2 | OMAR7O PROG ID 0806- |
| EC NO+ 415120 4151 | 20A 415178A | 411875 | 411939 431319 | 431320 PAGE 11 | EC NO. 415120 415120A | | | | 31320 PAGE 11 |
| | | | | | | | | | • |

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12A

| 1053/181 | .6 FUNCTION | TEST | | | | | | PAGE | 12 |
|----------|------------------------|---------|----------------|----------------|-----------------|----------|---------|--|--------|
| | OD8E 0 7E | 5 A | DC | /7E5A | | , | | 00/1/000 | |
| | 0D8F 0 5E | | | | | ζ. | | 80614980 | |
| | 0D90 0 76 | | DC | /5E72 | | 4 | | 80614990 | |
| | 0D90 0 76 | | DC | /7652 | |) | | 80615000 | |
| | 0D92 0 62 | | DC | /5666 /629A | | Ž | | 80615010 | |
| | 0D92 0 82 | | DC DC | /9EB2 | R T 1 | S J | | 80615020 | |
| | 0D94 0 B6 | | DC | /B692 | | ر ا | | 80615030 80615040 | |
| | 0D95 0 96 | | DC | /9646 | | Y Y | | 80615050 | |
| | 0D96 0 A2 | | DC | /A221 | | r SP | | 80615060 | |
| | 0D97 0 FE | | DC | /FEDA | | S, | | 80615070 | |
| | 0D98 0 DE | | DC | /DEF2 | LES | | | 80615080 | |
| | 0D99 0 F6 | D2 | DC | /F6D2 | | SMI | | 80615090 | |
| | OD9A O D6 | E6 | DC | /D6 E 6 | * | a | | 80615100 | |
| | OD9B 0 E2 | C6 | DC | /E2C6 | QTE I | LOR | | 80615110 | |
| | 0D9C 0 C2 | | DC | /C2BE | | JDR | | 80615120 | |
| | 0D9D 0 86 | | DC | /8682 | QSN (| CLN | | 80615130 | |
| | 0D9E 0 46 | | DC | /4642 | GTR I | | | 80615140 | |
| | 0D9F 0 06 | | DC | /0602 | PCT (| CNT | | 80615150 | |
| | ODAO O 09 | | DC | /09FF | RED | | | 80615160 | |
| | ODA1 O FF | FF | DC | /FFFF | | | | 80615170 | |
| | | | * | | 0.450 01.65 | | | 80615180 | |
| | | | * | L | OWER CASE | | | 80615190 | |
| | ODA2 0 00 | 0.1 | * LCASE DC | • | TTCN | т | | 80615200 | |
| | 0DA2 0 00 | | DC DC | 1 /2181 | ITCN' Sp ci | | | 80615210 | |
| | ODA 4 0 05 | | DC | /2161 /05FF | BLACI | | | 80615220 80615230 | |
| | ODA5 0 00 | | DC | 2 | ITCN | | | 80615240 | |
| | ODA6 0 81 | | DC | /813C | | Δ | | 80615250 | |
| | ODA7 0 18 | | DC | /181C | | Ē | | 80615260 | |
| | ODA8 0 30 | | DČ | /3034 | | Ē | | 80615270 | |
| | ODA9 0 10 | | DC | /1014 | | G | | 80615280 | |
| | ODAA 0 24 | 20 | DC | /2420 | | I | | 80615290 | |
| | ODAB O 7C | | DC | /7C58 | J | < | | 80615300 | |
| | ODAC O 5C | | DC | /5C70 | L | 4 | | 80615310 | |
| | ODAD 0 74 | | DC | /7450 | |) | | 80615320 | |
| | ODAE 0 54 | | DC | /5464 | | <u> </u> | | 80615330 | |
| | ODAF 0 60 | | DC | /6098 | | S | | 80615340 | |
| | ODBO 0 9C | | DC | /9CB0 | | ì | | 80615350 | |
| | ODB1 0 B4 | | DC | /B490 | | A . | | 80615360 | |
| | ODB2 0 94 ODB3 0 A0 | | DC | /9444 | | Y SP | | 80615370 | |
| | 0DB3 0 A0 | | DC DC | /A021 /FCD8 | | 2 | | 80615380 | |
| | 0DB5 0 DC | | DC | /DCF0 | | 4 | | 806153 9 0 8 06154 00 | |
| | 0DB6 0 F4 | | DC | /F4D0 | | 5 | | 80615410 | |
| | 0DB7 0 D4 | | DC | /D4E4 | | 3 | | 80615420 | |
| | ODB8 O EO | | DC | /E0C4 | | Ď | | 80615430 | |
| | ODB9 0 CO | | DC | /COBC | NOS . | | | 80615440 | |
| | ODBA 0 84 | 80 | DC | /8480 | - | , | | 80615450 | |
| | ODBB 0 44 | 40 | DC | /4440 | AND | \$ | | 80615460 | |
| | ODBC 0 04 | 00 | DC | /0400 | ΔT | • | | 80615470 | |
| | ODBD 0 09 | | DC | /09FF | RED | | | 80615480 | |
| | ODBE O FF | FF | DC | /FFFF | | | | 806 1549 0 | |
| | | | * | | | | | 80615500 | |
| | | | * | | | _ | | 80615510 | |
| | | | * | C | OLDR SHIF | 1 | | 80615520 | |
| | ODBF 0 00 | 0.2 | * | 2 | TTCN | • | | 80615530 | |
| | ODCO 0 81 | | CDLDR DC DC | 2 /81FF | I TCN' RED | 1 | | 80615540 80615550 | |
| | ODC1 0 00 | | DC | 20 | ITCN. | т | | 80615560 | |
| | 0DC2 0 09 | _ | DC | /0952 | RED I | | | 80615570 | |
| | ODC3 0 11 | | DC | /1105 | BSP | | | 80615580 | |
| | ODC4 O DA | | DC | /DA21 | | SP | | 80615590 | |
| | ODC5 0 21 | | DC | /21FF | ŠP | | | 80615600 | |
| | 0DC6 0 00 | | DČ | 59 | ITCN | Г | | 80615610 | |
| | ODC7 0 11 | FF | DC | /11FF | BSP | | | 80615620 | |
| | ODC8 0 00 | | DC | 20 | I TCN | Γ | | 80615630 | |
| | ODC9 0 09 | | DC | /0952 | RED I |) | | 80615640 | |
| | ODCA 0 11 | 05 | DC | /1105 | BSP | BLK | | 80615650 | |
| | | | | | | | | | |
| DATE | 28FEB66 | 01MAY66 | 27JUN66 | 0100767 | 17JUN68 | 14NDV69 | 20MAR70 | PRDG ID | 0806-1 |
| EC NO. | 415120 | 415120A | 415178A | 411875 | 4119 39 | 431319 | 431320 | PAGF. | 12 |

| ODCB 0 DA21 | DC | /DA21 | + SP | 80615660 |
|----------------------------|------------------|----------------|--------------------|--|
| ODCC 0 21FF | DC | /21FF | SP | 80615670 |
| ODCD 0 0038 | DC | 59 | ITCNT | 80615680 |
| ODCF 0 11FF | DC | /11FF | 8SP | 80615690 |
| ODCF 0 0014 | DC | 20 | ITCNT | 80615700 |
| 0DD0 0 0952 0DD1 0 1105 | DC | /0952 | RED O | 80615710 |
| 0DD2 0 DA21 | DC | /1105 | BSP BLK | 80615720 |
| 0DD2 0 DA21 0DD3 0 21FF | DC | /DA 21 | + SP | 80 61573 0 |
| 0DD3 0 21FF 0DD4 0 FFFF | DC | /21FF | SP | 80615740 |
| ODD4 O FFFF | DC * | /FFFF | | 80615750 |
| | * | | | 80615760 |
| | * | 0.44 | CV CDACE AND THREY | 80615770 |
| | * | DA | CK SPACE AND INDEX | 80615780 |
| 0DD5 0 0001 | SPNDX DC | 1 | ITCNT | 80615790 |
| 0DD6 0 2181 | DC | /2181 | SP CR | 80615800 |
| 0DD7 0 05FF | DC | /05FF | BLACK | 80615810 |
| 0DD8 0 0002 | DC | 2 | ITCNT | 80615820 80615830 |
| ODD9 0 8141 | DC | 78141 | CR TAB | 80615840 |
| ODDA 0 3611 | DC | /3611 | F * | 80615850 |
| 0DDB 0 111F | DC | /111E | * C | 80615860 |
| ODDC 0 1111 | DC | /1111 | * * | 80615870 |
| ODDD 0 3F11 | DC | /3F11 | A * | 80615880 |
| ODDE 0 1156 | DC | /1156 | * P | 80615890 |
| ODDF 0 1111 | DC | /1111 | * * | 80615900 |
| ODEO 0 9A11 | DC | /9 Al l | S * | 80615910 |
| ODE1 0 1111 | DC | /1111 | * * | 80615920 |
| ODE2 0 5A11 | DC | /5A11 | K * | 80615930 |
| ODE3 0 111E | DC | /111E | * C | 80615940 |
| ODE4 0 1111 | DC | /1111 | * * | 80615950 |
| ODE5 0 3E11 | DC | /3F11 | Α * | 80615960 |
| ODE6 0 111A | DC | /1 1 1A | * B | 80615970 |
| ODE7 0 8141 ODE8 0 2211 | DC | /8141 | CR TAB | 80615980 |
| ODE9 0 0376 | DC | /2211 | I BSP | 80 615 990 |
| ODEA 0 1103 | DC | /0376 | LNF N | 80 61 60 0 0 |
| ODER 0 3203 | D C DC | /1103 | BSP LNF | 80616010 |
| ODEC 0 1136 | | /3203 | D LNF | 80616020 |
| ODED 0 0311 | DC DC | /1136 | BSP F LNF BSP | 80616030 |
| ODEE 0 9603 | DC | /0311 /9603 | X LNE | 80616040 |
| ODFF 0 1109 | DC | /1109 | BSP RFD | 80616050 |
| 0DF0 0 81FF | DC | /81FF | CR CR | 80616060 |
| ODF1 0 0001 | DC | 1 | ITCNT | 80616070 |
| ODF2 0 81FF | DČ | /81FF | CR | 80616080 |
| ODF3 O FFFF | DC | /FFFF | CK | 80616090 |
| | * | | | 8 06161 00 8 061611 0 |
| | * | | | 80616110 |
| | * AUTOMATI | C CARRIER RE | TURN * | 80616130 |
| | * | | | 80616140 |
| ODF4 0 0001 | AUCAR DC | /0001 | ITCNT | 80616150 |
| ODF5 0 8105 | DC | /8105 | SP CR | 80616160 |
| ODF6 0 1E3C | DC | /1F3C | C A | 80616170 |
| ODF7 0 6060 | DC | /6060 | R R | 80616180 |
| ODF8 0 2034 | DC | /2034 | I E | 80616190 |
| ODF9 0 6021 | DC | /6021 | Ř | 80616200 |
| ODFA 0 6034 | DC | /6034 | R E | 80616210 |
| ODFB 0 9CB0 | DC | /9CB0 | ΤU | 80616220 |
| 00FC 0 6074 | DC | /6074 | RN | 80616230 |
| ODFD 0 21FF | DC | /21FF | | 806 16 240 |
| ODFE 0 0078 | DC | 120 | ITCNT | 80616250 |
| ODFF 0 21FF | DC | /21FF | SPACE | 80616260 |
| 0E00 0 0001 | DC | 1 | ITCNT | 80616270 |
| 0E01 0 0921 | DC | /0921 | RED | 80616280 |
| 0E02 0 1E3C | DC | /1E3C | C A | 80616290 |
| 0F03 0 6060 | DC | /6060 | R R | 80616300 |
| 0E04 0 20 3 4 | DC | /2034 | I F | 80616310 |
| AFAF A (AA) | ÐC | /6021 | R | |
| 0E05 0 6021 0E06 0 6034 | DC | /6034 | R E | 8 061 6320 |

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|------------------------------------|-------------------|-------------------------|-------------------|--|---------|----------------------------|------------|----------------|--------------------|---------|-------------------------------|
| /1816 FUNCTION TEST | | | | | 1053/18 | 16 FUNCTION TEST | | | | | |
| 0E07 0 9C80 | DC | /9CB0 | T U | 80616340 | | 0E47 0 C4E4 | DC | /C4E4 | 0 8 | | 80617020 |
| 0E 08 0 6074 0E09 0 21FF | DC DC | /6074 | R N | 80616350 80616360 | | 0E48 0 04F4 | DC | /D4F4 | 7 5 | | 80617030 |
| 0E04 0 0078 | DC | /21FF 120 | ITCNT | 80616370 | | 0E49 0 DCFC 0E4A 0 BC9C | DC DC | /DCFC /BC9C | 3 1 / T | | 80617040 80617050 |
| 0E0B 0 21FF | DС | /21FF | SPACE | 80616380 | | 0E4B 0 B494 | DC | /B494 | / I | | 80617060 |
| OEOC O FFFF | DC | /FFFF | 3. A32 | 80616390 | | 0E4C 0 A484 | DC | /A484 | Ý Î | | 80617070 |
| | * | | | 80616400 | | 0E4D 0 98B0 | OC. | /98B0 | sυ | | 80617080 |
| 0500 0 0001 | * | | | 80616410 | | 084E 0 90A0 | OC | /9040 | W Z | | 80617090 |
| 0E0D 0 0001 0E0E 0 2181 | RDCK DC DC | l /2101 | ITCNT SP CR | 80616420 80616430 | | 0E4F 0 8040 | DC | /8040 | , \$ | | 80617100 |
| 0E0F 0 05FF | DC | /2181 /05FF | BLACK | 80616440 | | 0E50 0 6050 0E51 0 7058 | 00 | /6050 | R D | | 80617110 |
| 0E10 0 0002 | DC | 2 | ITCNT | 80616450 | | 0E52 0 4464 | OC DC | /7058 /4464 | M K AND Q | | 80617120 80617130 |
| OE11 0 81CO | DC | /81CO | CR NDS | 80616460 | | 0E53 0 5474 | nc | /5474 | PN | | 80617140 |
| 0E12 0 8040 | DC | /8040 | , \$ | 80616470 | | 0E54 0 5C7C | DC | /5C7C | L J | | 806 1 715 0 |
| 0E13 0 0020 | DC | /0020 | • I | 80616480 | | 0E55 0 3C1C | DC | /3C1C | A C | | 86617160 |
| 0E14 0 60A0 0E15 0 E0D0 | DC DC | /60A0 | R Z 9 6 | 80616490 80616500 | | 0E56 0 3414 | DC | /3414 | E G | | 80617170 |
| 0E15 0 E000 | DC | /EODO /9050 | 9 6 W D | 80616510 | | 0E57 0 2404 0E58 0 1830 | 0C 0C | /2404 /1830 | H AT B D | | 80617180 |
| 0E17 0 1030 | DC | /1030 | F D | 80616520 | | 0E59 0 1020 | 00 | /1020 | F I | | 80617190 80617200 |
| 0E18 0 70B0 | DC | /70B0 | M Ū | 80616530 | | 0E5A 0 0021 | DC | /0021 | . 1 | | 80617210 |
| 0E19 0 F0D8 | DC | /F0D8 | 4 2 | 80616540 | | 0E5B 0 3E1E | DC | /3E1E | A C | | 80617220 |
| 0E1A 0 9858 | DC | /9858 | S K | 80616550 | | 0E5C 0 3616 | 00 | /3616 | E G | | 80617230 |
| 0E1B 0 1804 | DC | /1804 | B AT | 80616560 | | 0E5D 0 2606 | DC | /2606 | H PCT | | 80617240 |
| 0E1C 0 4484 0E1D 0 C4E4 | DC DC | /4484 /C4E4 | AND - 0 8 | 80616570 8 0 616580 | | 0E5E 0 1A32 0E5F 0 1222 | OC DC | /1A32 | B D F I | | 80617250 |
| 0E1E 0 A464 | DC | /A464 | YQ | 80616590 | | 0E60 0 0242 | DC | /1222 /0242 | CNT EXC | | 80617260 |
| 0E1F 0 2414 | DC | /2414 | н Ğ | 80616600 | | 0E61 0 6252 | DC | /6252 | R O | | 80617270 8061 7 280 |
| 0E20 0 5494 | DC | /5494 | РХ | 80616610 | | 0E62 0 725A | DC | /725A | M K | | 80617290 |
| 0E21 0 D4F4 | DC | /D4F4 | 7 5 | 80616620 | | 0E63 0 4666 | DC | 14666 | GTR Q | | 80617300 |
| 0E22 0 B474 | DC | /B474 | V N | 80616630 | | 0E64 0 5676 | DC | /5676 | P N | | 80617310 |
| 0E23 0 341C 0E24 0 5C9C | DC DC | /341C /5 C 9C | E C | 80616640 80616650 | | 0E65 0 5E7E | DC | /5E7E | L J | | 80617320 |
| 0E25 0 DCFC | DC | /DCFC | 3 1 | 80616660 | | 0E66 0 BE9E 0E67 0 B696 | DC DC | /BE9E /B696 | UDR T V X | | 80617330 |
| 0E26 0 BC7C | DC | /BC7C | , j | 80616670 | | 0E68 0 A686 | DC | /A686 | Y QSN | | 80617340 80617350 |
| 0E27 0 3C21 | DC | /3C21 | Α | 80616680 | | 0E69 0 9A82 | DC | /9AB2 | s ü | | 80617360 |
| 0E28 0 0242 | DC | /0242 | CNT ECX | 80616690 | | 0E6A 0 92A2 | DC | /92A2 | W Z | | 80617370 |
| 0E29 0 82C2 | DC | /82C2 | CLN # | 80616700 | | 0E6B 0 82C2 | DC | /82C2 | CLN # | | 80617380 |
| 0E2A 0 E2A2 0E2B 0 6222 | DC DC | /E2A2 /6222 | QTE Z R LDR | 80616710 80616720 | | 0E6C 0 E2D2 0E6D 0 F2DA | OC DC | /E2D2 /F2DA | QTE SMI | | 80617390 |
| 0E2C 0 1252 | DČ | /1252 | FQ | 80616730 | | 0E6E 0 C6E6 | DC | /C6E6 | LNT & LOR & | | 80617400 8 0617 410 |
| 0E2D 0 92D2 | DC | /92D2 | W SMI | 80616740 | | 0E6F 0 D6F6 | DC | /06F6 | * 11 | | 80617410 |
| 0E2E 0 F2B2 | DC | /F2B2 | I U | 80616750 | | 0670 0 DEFE | 00 | /DEFE | LES % | | 80617430 |
| 0E2F 0 7232 | DC | /7232 | M 0 | 80616760 | | 0E71 0 09FF | DC | /09FF | REO | | 80617440 |
| 0E30 0 1A5A 0E31 0 9ADA | DC DC | /1A5A | B K S T | 80616770 80616780 | | 0 E7 2 0 FFFF | 0C ** | /FFFF | | | 80617450 |
| 0E32 0 C686 | DC | /9ADA /C686 | LNT QSN | 80616790 | | | * | | | | 80617460 |
| 0E33 0 4606 | DC | /4606 | GTR PCT | 80616800 | | 0E73 0 0001 | TWIST OC | 1 | ITCNT | | 80617470 80617480 |
| 0E34 0 2666 | DC | /2666 | H Q | 80616810 | | 0E74 0 2181 | 00 | 72181 | SP CR | | 80617490 |
| 0E35 0 A6E6 | DC | /A6E6 | Y a | 80616820 | | 0E75 0 05FF | OC | /05FF | BLACK | | 80617500 |
| 0E36 0 D696 0E37 0 5616 | DC | /D696 | * X | 80616830 | | 0E76 0 0002 | DC | 2 | ITCNT | | 80617510 |
| 0E37 0 3676 | DC DC | /5616 /36 7 6 | P G E N | 80616840 80616850 | | 0E77 U 81C0 0E78 O 3E80 | 00 | /81C0 | CR NDS | | 80617520 |
| 0E39 0 B6F6 | DC | /B6F6 | V E | 80616860 | | 0E79 0 7E40 | DC DC | /3E80 /7E40 | Α , J \$ | | 80617530 |
| 0E3A 0 DE9E | DC | /DE9E | LFS T | 80616870 | | 0E7A 0 BE00 | DC | /BE00 | UOR . | | 80617540 80617550 |
| 0E3B 0 5E1E | DC | /5E1E | L C | 80616880 | | 0E7B 0 FE20 | DC | /FE20 | % I | | 80 6175 60 |
| 0E3C 0 3E7E | DC | /3E7E | A J | 80616890 | | 0E7C 0 0E60 | 00 | /DE60 | LES R | | 80617570 |
| OE3D O BEFE | DC | /BEFE | UDR % | 80616900 | | 0E7D 0 9EA0 | 0C | /9EA0 | ΤZ | | 80617580 |
| 0E3E 0 09FF | DC | /09FF | RED | 80616910 806169 2 0 | | 0E7E 0 5EE0 | 0C | /5EE0 | L 9 | | 80617590 |
| OE3F O FFFF | DC * | /FFFF | | 80616930 | | 0E7F 0 1ED0 0E80 0 3690 | 0C 0C | /1ED0 /3690 | C 6 E W | | 80617600 |
| | * | | | 80616940 | | 0E81 0 7650 | DC | /7650 | N D | | 80617610 8061 7 620 |
| 0E40 0 0001 | RDLL DC | 1 | ITCNT | 80616950 | | 0E82 0 B610 | DC | /B610 | V F | | 80617630 |
| 0E41 0 2181 | DC | /2181 | SP CR | 80616960 | | 0E83 0 F630 | oc | /F630 | E 0 | | 80617640 |
| 0E42 0 05FF | DC | /05FF | BLACK | 80616970 | | 0E84 0 D670 | DC | /D670 | * M | | 80617650 |
| 0E43 0 0002 0E44 0 81C0 | 0C | 2 /8100 | ITCNT CP NDS | 8 0 616980 8 061699 0 | | 0E85 0 96B0 0E86 0 56F0 | DC | /96B0 | X U | | 80617660 |
| 0E44 0 8100 0E45 0 E0D0 | DC DC | /81CO /EODO | CR NDS 9 6 | 80617000 | | 0E87 0 16D8 | DC OC | /56F0 /16D8 | Р 4 G 2 | | 80617670 |
| 0E46 0 F008 | DC | /F0D8 | 4 2 | 80617010 | | 0E88 0 2698 | DC | /2698 | H S | | 80617680 80617690 |
| | | | | | | | 50 | , 20,0 | J | | 00011090 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 28FEB66 01MAY6 | 6 27 JUN66 | 010CT6 7 | 17JUN68 14NOV69 | 20MAR70 PRDG IO 0806-1 | DATE | 28FEB66 01MAY6 | 56 27JUN66 | 01DCT67 | 17JUN68 14NOV69 | 20MAR70 | PROG ID |

1053/1816 FUNCTION TEST

0806-1

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| PAGE | | 14 |

| 1033/101 | o Function 1531 | | | | | | | | |
|----------|----------------------------|---------------|----------|-------------------|--------------|---------------------|---------|-------------------------------|--------|
| | 0E89 0 6658 | | DC | /6658 | Q K | | | 80617700 | |
| | 0E8A 0 A618 | | DC | /A618 | Y 8 | | | 80617710 | |
| | 0E8B 0 E604 | | DC | /E604 | a A | T | | 806 17720 | |
| | 0E8C 0 C644 | | DC | /C644 | LOR A | IND | | 80617730 | |
| | 0E8D 0 8684 | | DC | /8684 | QSN - | • | | 8061774 0 | |
| | 0E8E 0 46C4 | | DC | /46C4 | GTR 0 | | | 80617750 | |
| | 0E8F 0 06E4 | | DC | /06E4 | PCT 8 | | | 80617760 | |
| | 0E90 0 1AA4 | | DC | /1 AA4 | B Y | | | 80617770 | |
| | 0E91 0 5A64 | | DC | /5A64 | KG | | | 80617780 | |
| | 0E92 0 9A24 | | DC | /9A24 | S H | | | 80617790 | |
| | 0E93 0 DA14 | | DC | /DA14 | 3 | | | 80617800 | |
| | 0E94 0 F254 0E95 0 B294 | | DC DC | /F254 /B294 | LNT P U X | | | 80617810 | |
| | 0E96 0 72D4 | | DC | /7204 | M 7 | | | 80617820 | |
| | 0E97 0 32F4 | | DC | /32F4 | D 5 | | | 80617830 80617840 | |
| | 0E98 0 12B4 | | DC | /12B4 | FV | | | 8061785 0 | |
| | 0E99 0 5274 | | DC | /5274 | D 1 | | | 80617860 | |
| | 0E9A 0 9234 | | DC | /9234 | WE | | | 80617870 | |
| | 0E9B 0 D21C | | DC | /D21C | SMI C | , | | 80617880 | |
| | 0E9C 0 E25C | | DC | /E25C | QTE L | | | 80617890 | |
| | 0E9D 0 A29C | | DC | /A29C | Z 7 | Ī | | 806 1790 0 | |
| | 0E9E 0 62DC | | DC | /62DC | R 3 | 3 | | 80617910 | |
| | 0E9F 0 22FC | | DC | /22FC | I I | | | 80617920 | |
| | OEAO O O2BC | | DC | /02BC | CNT / | | | 80617930 | |
| | OEA1 0 427C | | DC | /427C | EXC | | | 80617940 | |
| | OEA2 O 823C | | DC | /823C | CLN A | • | | 80617950 | |
| | OEA3 0 C221 | | DC | /0221 | # | | | 80617960 | |
| | 0EA4 0 09FF | C1 5110 | DC | /09FF | RED | | | 80617970 | |
| | 0EA5 0 0001 0EA6 0 05FF | CLEND | | 1 (05.55 | ITCNI | | | 80617980 | |
| | OEA7 O FFFF | | DC DC | /05FF /FFFF | BLACK | ` | | 80617990 8 0 618000 | |
| | OLAY O TITT | **** | _ | ,,,,, ******** | ***** | ****** | **** | 80618010 | |
| | | | | ***** | | | | 80618020 | |
| | | * | | | | | | 80618030 | |
| | | * | | | PRINTER OL | TPUT STATU | IS | 80618040 | |
| | | * | | | TABLE | _ | | 80618050 | |
| | | * | | | PRINTER NO | 0 | | 806 180 60 | |
| | 0000 OEA8 | | BSS | E 0 | | | | 80618070 | |
| | OEA8 1 OD73 | PTRO | DC | TACAR | | POINTER | | 80618080 | |
| | 0EA9 0 0002 | | DC | 2 | | PDINTER | | 8 061809 0 | |
| | OEAA O 8000 | | DC | /8000 | | OT SELECTE | | 8 0 618100 | |
| | | * | | /C000 | | N KEYBOARD | | 80618110 | |
| | | * | | /0000 | | VC REQUEST | | 80618120 | |
| | OEAB O 81FF | | DC | /81FF | | PTR OUTPUT | | 80618130 | |
| | 0EAC 0 0001 | | DC | 1 | | ATION CDUNT WORD | | 80618140 | |
| | OEAD 0 0001 OEAE 0 0000 | | DC DC | 1 0 | | RUND PRINTED | | 80618150 | |
| | 0EAF 0 0000 | | DC | 0 | | ITCNT ADDR | DT | 80618160 80618170 | |
| | OEBO 1 OEAB | | DC | PTRO&O | | TICNI ADDR | | 80618180 | |
| | 0EB1 0 0100 | | DC | /0100 | | COMMAND | | 80618190 | |
| | 0EB2 0 0000 | PTRON | | 0 | PRINI | | | 80618200 | |
| | 0EB3 0 0701 | | DC | /0701 | | DSW COMMA | IND | 80618210 | |
| | 0EB4 0 0000 | | DC | 0 | | | | 8061822 0 | |
| | 0EB5 0 0400 | | DC | /0400 | SELEC | CT KEYBOARD | CMD | 80618230 | |
| | 0EB6 1 0EB4 | | DC | PTRO&K | EΥ | | | 80618240 | |
| | 0EB7 0 0200 | | DC | /0200 | | KEY8OARD C | COMND | 8061825 0 | |
| | OEB8 0 0000 | | DC | /0000 | | R DSW WAS | | 80618260 | |
| | 0EB9 0 0000 | | DC | /0000 | DSW S | SHDULD HAVE | BEEN | 80618270 | |
| | | * | | | | | | 80618280 | |
| | | * | | | DDINTED NO | | | 80618290 | |
| | | * | | | PRINTER NO | , 1 | | 80618300 | |
| | OEBA 1 OD73 | * PTR1 | DC | TACAR | MODD | POINTER | | 80618310 80618320 | |
| | 0EBB 0 0002 | PIKI | DC | 2 | | POINTER | | 80618330 | |
| | 0EBC 0 8000 | | DC | /8000 | | NOT SELECTE | :n | 80618340 | |
| | 0200 0 0000 | * | DC | /0000 | | N KEYBOARE | | 80618350 | |
| | | * | | /0000 | | SVC REQUEST | | 80618360 | |
| | 0EBD 0 81FF | | DC | /81 FF | | PTR OUTPUT | | 80618370 | |
| | | | | | | | | | |
| DATE | 28FEB66 01MAY66 | 27 J U | INAA | 0100767 | 17JUN68 | 14NOV69 | 20MAR70 | PROG ID | 0806-1 |
| EC NO. | 415120 415120A | | | 411875 | 411939 | 431319 | 431320 | PAGE | 14 |
| 20 ,,04 | .15125 1151204 | | | ,,,,, | , | .,,,,, | ,51560 | 1 405 | 14 |
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| 1052/101 | / FUNCTION TEST | | | | | | PA GE |
|----------|-----------------------------|-----------------------------|------------------|-------------------|--------------------|-------------------|------------------------------|
| 1053/181 | .6 FUNCTION TEST | | | | | | |
| | OE8E 0 0001 | DC | C 1 | ITERA | TION COUNT | • | 80618380 |
| | OEBF 0 0001 | DC | | | WORD | | 80618390 |
| | 0EC0 0 0000 | DC | | | PRINTED | | 80618400 |
| | OEC1 0 0000 | DC | | | ITCNT ADDR | : P T | 80618410 |
| | OEC2 1 OEBD | DO | C PTR1&O | UT | | | 80618420 |
| | OEC3 0 0100 | DC | | | COMMAND | | 80618430 |
| | OEC4 O OOO1 | DC | C 1 | | | | 80618440 |
| | OEC5 0 0701 | DO | C /0701 | SENSE | DSW COMMA | ND . | 80618450 |
| | OEC6 0 0000 | DO | C 0 | _ | | | 80618460 |
| | OEC7 0 0400 | DO | C /0400 | SELEC | T KEYBOARD | CMD | 80618470 |
| | OEC8 1 OEC6 | DO | C PTR1&K | EY | | | 80618480 |
| | 0EC9 0 0200 | DO | C /0200 | READ | KEYBOARD C | OMND | 80618490 |
| | OECA O O OOO | DC | /0000 | ERROR | DSW WAS | | 80 61850 0 |
| | 0EC8 0 0000 | DO | C /0 00 0 | DSW S | HOULD HAVE | BEEN | 80618510 |
| | | * | | | | | 80618520 |
| | | * | | | | | 80618530 |
| | | * | | PRINTER NO | 2 | | 80618540 |
| | | * | | | | | 80618550 |
| | OECC 1 OD73 | PTR2 DC | C TACAR | WORD | PDINTER | | 8 06185 60 |
| | 0ECD 0 0002 | DO | C 2 | TEST | POINTER | | 80618570 |
| | OECE 0 8000 | DO | | | IOT SELECTE | | 8061858 0 |
| | | * | /C00 0 | _ | N KEY80ARE | | 80618590 |
| | | * | /0000 | | VC REQUEST | | 80618600 |
| | 0ECF 0 81FF | D(| | | PTR OUTPUT | | 80618610 |
| | OEDO O 0001 | DO | - | | TION COUNT | | 80618620 |
| | OED1 0 0001 | DO | | | WORD | | 80618630 |
| | 0ED2 0 0000 | 00 | | | PRINTED | | 80618640 |
| | OED3 0 0000 | ĐQ | | | ITCNT ADDR | C P I | 8 0 6 1 8650 |
| | 0ED4 1 0ECF | DQ | | | | | 80618660 |
| | OED5 0 0100 | D(| | WRITE | COMMAND | | 80618670 |
| | 0ED6 0 00 0 2 | DO | | | | | 806 1 86 80 |
| | OED7 0 0701 | 00 | | SENSE | DSW COMMA | IND | 80618690 |
| | 0ED8 0 0000 | DO | | 25. 50 | | | 80618700 |
| | 0ED9 0 0400 | D(| | | T KEYBOARD | CMD | 80618710 |
| | OEDA 1 0ED8 | DO | _ | | W.C.V.D.O.A.D.D. O | | 80618720 |
| | 0ED8 0 0200 | D(| | | KEYBOARI) C | OMND | 80618730 |
| | OEDC 0 0000 OEDD 0 0000 | DO | | | DSW WAS | UEEN | 80618740 |
| | 0200 0 0000 | D(| C /0000 | D2M 2 | HOULD HAVE | BEEN | 80618750 |
| | | * | | | | | 80618760 |
| | | | | 00111750 110 | | | 80618770 |
| | | * * | | PRINTER NO | 1 3 | | 80618780 |
| | OEDE 1 0073 | PTR3 DO | C TACAR | MUBU | POINTER | | 80618790 |
| | 0EDF 0 0002 | PIKS DO | _ | | POINTER | | 80618800 |
| | 0EE0 0 8000 | D(| | | OT SELECTE | n. | 80618810 8061882 0 |
| | 0220 0 0000 | * | /C000 | | N KEYBOARE | | 80618830 |
| | | * | /000 0 | | VC REQUEST | | 80618840 |
| | 0EE1 0 81FF | | • | | PTR OUTPUT | | 80618850 |
| | 0EE2 0 0001 | D(| | | TION COUNT | | 80618860 |
| | 0EE3 0 0001 | D(| | | WORD | | 80618870 |
| | 0EE4 0 0000 | D(| | | PRINTED | | 80618880 |
| | 0EE5 0 0000 | D(| | | ITCNT ADDR | R PT | 80618890 |
| | 0EE6 1 0EF1 | DO | | | | • | 80618900 |
| | OEE7 0 0100 | DO | • | | COMMAND | | 80618910 |
| | 0EE8 0 0003 | DO | | | | | 80618920 |
| | OEE9 0 0701 | Di | | SENSE | DSW COMMA | ΔNĐ | 80618930 |
| | OEEA 0 0000 | DO | | 52,,52 | | - | 80618940 |
| | OEEB 0 0400 | Di | | SELEC | T KEYBOARD | CMD | 80618950 |
| | OEEC 1 OEEA | DO | | - | | | 80618960 |
| | OEED 0 0200 | D | | | KEYBOARD C | OMND | 80618970 |
| | OEEE 0 0000 | DC | | | DSW WAS | | 80618980 |
| | 0EEF 0 0000 | D | | DSW S | HOULD HAVE | BEEN | 80618990 |
| | | * | | | | • | 80619000 |
| | | * | | | | | 80619010 |
| | | * | | PRINTER NO |) 4 | | 80619020 |
| | | * | | | | | 80619030 |
| | 0EF0 1 0D73 | PTR4 DO | C TACAR | WORD | POINTER | | 80619040 |
| | 0EF1 0 00 0 2 | DO | | | POINTER | | 80619050 |
| | | | | | | | |
| DATE | 2055844 614 | AV44 27 HB4 | / 010CT/7 | 17 11144 0 | 1.4.0004.0 | 20M4525 | 0000 10 |
| EC NO. | | AY66 27JUN66 120A 415178 | | 17JUN68 411939 | 14NOV69 431319 | 20MAR70 431320 | PROG ID PAGE |
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18M MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM

DATE

EC NO.

415120

| IBM MAINTENANCE DIAGNOSTI | C PROGRAM | FOR THE | 1800 SYST | EM | PART NO. 219636 PAGE 15 |
|----------------------------|----------------------|------------------|-------------------------|--|----------------------------|
| 1053/1816 FUNCTION TEST | | | | | |
| 0EF2 0 8000 | | DC | /8000 | PTR NOT SELECTED | 80619060 |
| | * | | /C000 | PTR IN KEYBOARD TEST | 80619070 |
| | * | | /0000 | PTR SVC REQUESTEO | 80619080 |
| 0EF3 0 81FF | | DC | /81FF | NEXT PTR OUTPUT WORD | 80619090 |
| 0EF4 0 0001 0EF5 0 0001 | | D C DC | 1 | ITERATION COUNT SHIFT WORD | 80619100 80619110 |
| 0EF6 0 0000 | | D C | 0 | WDRDS PRINTED | 8061912 0 |
| 0EF7 0 0000 | | DC | Ö | LAST ITCHT ADOR PT | 80619130 |
| 0EF8 1 0EF3 | | DC | PTR4&3 | | 80619140 |
| 0EF9 0 0100 | | DC | /0100 | WRITE CDMMAND | 80619150 |
| 0EFA 0 0004 | | DC | 4 | | 80619160 |
| 0EFB 0 0701 | | DC | /0701 | SENSE DSW CDMMAND | 80619170 |
| 0EFC 0 0000 | | DC | 0 | SELECT KEYBDARO CMD | 80619180 80619190 |
| 0EFD 0 0400 0EFE 1 0EFC | | DC DC | /0400 PTR4&KEY | SELECT KETBUAKO CHU | 80619190 |
| 0EFF 0 0200 | | DC | /0200 | READ KEYBDARD COMND | 80619210 |
| 0F00 0 0000 | | DC | /0000 | ERRDR OSW WAS | 80619220 |
| 0F01 0 0000 | | DC | /0000 | DSW SHOULO HAVE BEEN | 80619230 |
| | 苹 | | | | 80619240 |
| | * | | | | 80619250 |
| | * | | PRI | NTER ND 5 | 80619260 80619270 |
| 0500 1 0073 | * 0. T 0.5 | D.C | TACAR | WORD POINTER | 80619280 |
| 0F02 1 0D73 0F03 0 0002 | PTR5 | DC DC | 2 | TEST POINTER | 80619290 |
| 0F04 0 8000 | | DC | Ž8000 | PTR NDT SELECTED | 80619300 |
| 0. 0. 0 0000 | * | | /C000 | PTR IN KEYBDARD TEST | 80619310 |
| | * | | /0000 | PTR SVC REQUESTED | 80619320 |
| 0F05 0 81FF | | DC | /81FF | NEXT PTR OUTPUT WORD | 80619330 |
| 0F06 0 0001 | | DC | 1 | ITERATION COUNT | 80619340 |
| 0F07 0 0001 | | DC | 1 | SHIFT WORD | 80619350 |
| 0F08 0 0000 | | DC | 0 | WORDS PRINTED | 80619360 80619370 |
| 0F09 0 0000 0F0A 1 0F05 | | DC DC | O PTR5&OUT | LAST ITCNT ADDR PT | 80619370 |
| 0F0B 0 0100 | | DC | /0100 | WRITE COMMANO | 80619390 |
| 0F0C 0 0005 | | DC | 5 | | 80619400 |
| 0F0D 0 0701 | | DC | /0701 | SENSE OSW CDMMAND | 80619410 |
| OFOE 0 0000 | | DC | 0 | | 80619420 |
| 0F0F 0 0400 | | oc | /0400 | SELECT KEYBOARD CMD | 80619430 |
| 0F10 1 0F0E | | DC | PTR5&KEY | DEAD WEYDOADD COMID | 80619440 |
| 0F11 0 0200 | | DC | /0200 | READ KEYBOARD COMND | 80619450 |
| 0F12 0 0000 0F13 0 0000 | | DC DC | /0000 /0000 | ERROR DSW WAS DSW SHDULO HAVE BEEN | 80619460 80619470 |
| 0000 | * | DC . | 70000 | DSW SHOOLS HAVE BEEN | 80619480 |
| | * | | | | 80619490 |
| | * | | PRI | NTER NO 6 | 80619500 |
| | * | | | | 80619510 |
| OF14 1 OD73 | PTR6 | D C | TACAR | WORD POINTER | 80619520 |
| 0F15 0 0002 | | DC | 2 | TEST POINTER | 80619530 |
| 0F16 0 8000 | | DC | /8000 | PTR NOT SELECTEO | 80619540 |
| | * | | /C000 /0 0 00 | PTR IN KEYBDARD TEST PTR SVC REQUESTED | 80619550 80619560 |
| 0F17 0 81FF | * | DC | /81FF | NEXT PTR OUTPUT WORD | 80619570 |
| 0F18 0 0001 | | DC | 1 | ITERATION COUNT | 80619580 |
| 0F18 0 0001 0F19 0 0001 | | D C | i | SHIFT WORD | 80619590 |
| 0F1A 0 0000 | | DC | ō | WDRDS PRINTED | 80619600 |
| 0F18 0 0000 | | DC | 0 | LAST ITENT ADOR PT | 80619610 |
| DF1C 1 0F17 | | DC | PTR6&0UT | | 80619620 |
| OF1D 0 0100 | | DC | /0100 | WRITE COMMAND | 80619630 |
| OF1E 0 0006 | | DC | 6 | CENCE OCH CONTANO | 80619640 |
| 0F1F 0 0701 | | DC | /0701 | SENSE OSW COMMAND | 80619650 80619660 |
| 0F20 0 0000 0F21 0 0400 | | DC DC | 0 /0400 | SELECT KEYBOARD CMD | 80619670 |
| 0F21 0 0400 0F22 1 0F20 | | DC | PTR6&KEY | SEEEGI KEIDUAKU UMU | 80619680 |
| 0F22 1 0F20 0F23 0 0200 | | DC | /0200 | READ KEYBOARD COMNO | 80619690 |
| 0F24 0 0000 | | DC | /0000 | ERROR DSW WAS | 80619700 |
| 0F25 0 0000 | | DČ | /0000 | DSW SHOULD HAVE BEEN | 80619710 |
| | * | | | | 80619720 |

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| IBM MAINTENANCE | OIAGNOSTIC | PROGRAM | FOR | THE | 1800 | SYSTEM | |
|-----------------|------------|---------|-----|-----|------|--------|--|
| 1053/1816 FUNCT | ION TEST | | | | | | |

| | * | | 00.11 | UTED NO 7 | 80619740 |
|----------------------------|---------------------|----------|----------------|--|----------------------|
| | * | | PRI | NTER NO 7 | 80619750 |
| 0F26 1 0073 | т Р Т R 7 | OC. | TACAR | WORO POINTER | 80619760 |
| 0F28 1 0073 | PIKI | 0C | 2 | TEST POINTER | 80619770 |
| 0F28 0 8000 | | | _ | | 80619780 |
| 0F28 0 8000 | * | oc | /8000 | PTR NOT SELECTED | 80619790 |
| | * | | /C000 | PTR IN KEYBOARD TEST | 80619800 |
| 0F29 0 81FF | T | oc | /0000 /81FF | PTR SVC REQUESTEO NEXT PTR OUTPUT WDRD | 80619810 |
| 0F2A 0 0001 | | DC | 1 | ITERATION COUNT | 80619820 80619830 |
| 0F2B 0 0001 | | OC | 1 | SHIFT WORD | |
| 0F2C 0 0000 | | DC | 0 | WORDS PRINTED | 80619840 80619850 |
| 0F2D 0 0000 | | DC | Ö | LAST ITCNT ADDR PT | 80619860 |
| 0F2E 1 0F29 | | DC | PTR7&DUT | EAST TION ADDR 77 | 80619870 |
| 0F2F 0 0100 | | DC | /0100 | WRITE COMMAND | 80619880 |
| 0F30 0 0007 | | DC | 7 | KNITE ODTAINE | 80619890 |
| 0F31 0 0701 | | DC | /0701 | SENSE DSW CDMMAND | 80619900 |
| 0F32 0 0000 | | DC | 0 | | 80619910 |
| 0F33 0 0400 | | OC | /0400 | SELECT KEYBDARO CMO | 80619920 |
| 0F34 1 0F32 | | DC | PTR7&KEY | | 80619930 |
| 0F35 0 0200 | | DC | /0200 | READ KEYBOARD CDMND | 80619940 |
| 0F36 0 0000 | | DC | /0000 | ERROR DSW WAS | 80619950 |
| 0F37 0 0000 | | DC | /0000 | DSW SHOULD HAVE BEEN | 80619960 |
| | * | | | | 80619970 |
| | * | | | | 80619980 |
| 0F38 1 0D73 | PTR8 | DC | TACAR | WORD POINTER | 80619990 |
| 0F39 0 0002 | | ÐC | 2 | TEST POINTER | 80620000 |
| OF3A O 8000 | | DC | /8000 | PTR NOT SELECTED | 80620010 |
| | * | | /C000 | PTR IN KEYBOARO TEST | 806 2 0020 |
| 0500 0 0155 | * | | /0000 | PTR SVC REQUESTED | 806 200 30 |
| 0F3B 0 81FF | | 00 | /81FF | NEXT PTR OUTPUT WORD | 80620040 |
| 0F3C 0 0001 | | OC. | 1 | ITERATION COUNT | 80620050 |
| 0F3D 0 0001 | | DC | 1 | SHIFT WORD | 80620060 |
| 0F3E 0 0000 | | DC | 0 | WORDS PRINTED | 80620070 |
| 0F3F 0 0000 0F40 1 0F3B | | DC DC | O PTR8&OUT | LAST ITCNT ADOR PT | 80620080 |
| 0F40 1 0F3B | | DC | /0100 | WRITE COMMAND | 80620090 80620100 |
| 0F42 0 0007 | | DC | 70100 | WATE COMMAND | 80620110 |
| 0F43 0 0701 | | DC | , /0701 | SENSE DSW COMMAND | 80620110 |
| 0F44 0 0000 | | 0C | 0 | SENSE USA COMMAND | 80620130 |
| 0F45 0 0400 | | DC | /0400 | SELECT KEYBOARD CMD | 80620130 |
| 0F46 1 0F44 | | DC | PTR8&KEY | SEECOT REPROPRIES ONE | 80620150 |
| 0F47 0 0200 | | DC | /0200 | REAO KEYBOARD CMO | 80620160 |
| 0F48 0 0000 | | OC. | /0000 | ERROR DSW WAS | 80620170 |
| 0F49 0 0000 | | оč | /0000 | DSW SHOULD HAVE BEEN | 80620180 |
| | * | | • | | 80620190 |
| | * | | • | | 80620200 |
| OF4A O 0000 | | DC | 0 | | 80620210 |
| OFFD | | ORG | /7FE&PID | | 80620220 |
| OFFD 0 0000 | PEND | oc | 0 | | 80620230 |
| OFFE O8FA | | EN0 | TYCUS | | 80620240 |
| NO STATEMENTS FL. | AGGEO I | N THE | ABOVE ASSEMBL | _Y | |

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DVA3

DVA4 DVA5

DVA6

DVA7

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FC ND .

OB 3A 095A

0B43 095B

0B4C 095C

OB5E 095E

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1053/1816 FUNCTION TEST
        ADR 0000 0AB7 OCCE
              OA5C OA5A
        ADRS
        AGAIN 091F 0807 091B 094C
        AGAN1 0926 0924
AGAN2 092C 0931
AGAN4 093A 092E
AGAN5 0932 0929 0937
        AGAN6 0938 0934
        AGAN8 093E 0925
               OBO7 OAE7
        ALL
               OC96 OBDA OBEO OBE2 OCOO OCO4 OCOB OC10 OC19 OC1B OC1F OC22 OC26 OCBB
        ANY
                     OCC2 OCD2
        AUCAR ODF4 0C91
        AWAIT OCB5 OCB5
        BASIC 0806 08C4 08E0 09EA 0A70 0AE4 0C40
        BEGIN 012C OBFB
        BSPSE OBC9 OCOD
        BSYER OB3A OBF3
        BSYOK 0B40 0B39
        BUILD 099A 09AB
         CKDSX OC7C OC61
         CKERR 09F4 09E6 09F1
         CKHAV 09F3 09ED
         CKREL 0A16 09F3 0A19 0A2B 0A4E
         CKRXT 0A27 0A1F 0A20 0A21
         CLEND OEA5
         CMPRE OBCD OBAB
         CNVRT OBA5 OBAB
         COLOR ODBF OCBF
         COMIL 087D 08BE 08EB
         COMIN 0B70 0B25 0B2E 0B37 0B40 0B49 0B52 085B 0B64 0B6D 0B77
         CDMIX 0877 0B85 0887 08BB 08BC 08CB 08E3 0BE7 08F3
         COMI1 08B4 0B7A
         COMI 2 08B7 08B3
         COMI4 08E8 08BB
CXREL 0C56 0C51
         DDEFS 094E 0976
         DDEFX 081B
                     0904 OCE9
         DDEFO 0811 0902 092C 0938 093A 094E 0967 0A17 0A1D 0A55 0C56 0C5C 0C6B 0C72
         DDEF1 0812 094F
         DDEF2 0813 0950
         DDEF3 0814 0951
         DDEF4 0815 0952
         DDEF5 0816 0953
         DDEF6 0817 0954
         DDEF7 081B 0955
         DDEF8 0819 0956
         DETBL 08A8 0895
         DETC1
               OBA2 0897
               08BC 0B86 0B9B 0BA0 0AF7 0B37
         DETE
               0894 OB9A
         DETG
               089B 0891 0BA6
         DETR
         DETS
               OBAB OB8E OB9F
         DETX
               089D 0B8D 0B94 08A7
         DSWAS 0B44 0B54 0B62
         DSWBS
               0846 0B69 0B6D
         DSWBY
               0B42 0B35 0B3A 0BEF
               OB4B 0927 OB89 OBBA OB8D
         DSWCS
               0957 097C 099A 09A0 09A5 09DC
         DVAS
         DVAO
               OB1D 0957 0A56 0C73
         DVA1
               0B28 0958
         DVA2
               0B31 0959
```

```
GO 1
              090C
                   0900
        HALT
              0133
        INERR 0809 09F5
        INERO OBOC OB1F
        INER1 OBOF OB14
        INER2 0B17 0B11
        ITR
        KBDDL 08AE 0BC1
        KBDRQ OBBF
                    OBB5
        KBDRR OBCD
                   OBC8
        KC000 0961
                   OBEC
        KECDD
              OCF3
        KEYBD 0B74 0A64
        KEYIN OB93 OBBB
        KEYPT
              OB7E OB77
        KFFE7 OBC7 OBF9
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```
DVA8 0B67 095F
ELVEN 0A30 0A72 0C42
EMESG OCB2 OBBA OBBE OC31 OC32 OC33 OC35 OC3A OC60
END
      012E
            OCBA
            0882
ENDM
      0C10
ENDM1 OC1D
            0017
ENDM2 OC25
            0C14
ENDM3 0C27 0C24
EPA
      0B08
ERBUY 0C76 0C71
ERDLY OC4B OC45
ERDDD 0C66 0C63 0C76
ERDSW OC5E OC5B OC7C
ERGET OC6F
ERIND 09E2 0889 09F4 0B0A
ERLDP 0C63 0C62
      0010 0888 0B0F 0B17 0B1E
ERR
ERRDR 0130 0C5E
ERSE
      OBF7 OBB6
ERSEA OBCB OBF7 OBFB
ERSE1 OCO7
            OBFD
ERSE2 OCOD OCO6
ERSLC OBC5 OBB4
EXEC OAOO OA3D OA4A OA5B OBO1
EXECA OA5B OA48
EXECO 0A39
            OAOB OA10 OA36
EXEC1 0A02
            0A40 0A46 0A4D
EXEC2 0A04
            0A38
EXEC3 0A42 0A06
EXEC5 0A14 0A11
EXEC6 0A44 0A13 0A15 0A38
EXEC7 0A67 0A54 0B72
EXECB OA5B
EXEC9 OA6A
            0A41
EXIT OBE6
            OBDC
FSTSW 08F7
            OBFA OBFF 090B
      OC95 OABO OBO7 OC21 OC25
FUND
FUNR
      OCBB
            OAA9 OAAE OAB4 OBO7 OCCC
F0C00 0B43
F0200
      0B47
            OABE OB6A OC4B
      OBFE 0806 091D 09BF
       OA6C OA7B OA7A OA85 OAB7 OABA OAC1 OAC8 OAD4 OAD9
       08F6 087C 0A0E 0CC9
INTSW OB1C OB20 OA4F OC6C
      0004 OAAB OAD3 OAD5 OADE OCO3
KA000 08F5 08BD 08CD
            OBA5 OCB3
      000C 0911 09A4 0B67 0B7E 0BB3 0BB6 0B95 0B9B 0BA7 0BAC 0BB1 0BB5 0BBB
             OEB6 OEC8 OEDA OEEC OEFE OF10 OF22 OF34 OF46
KEYCR OBCC 087F 0894 0897 089C
KEYER OBB6 OBB4 OBF2
KE000 0C89 0BB9 0BE6 0C34 0C4D KFC00 0A2E 0A42
KFFFF OBO4 OADF OAEA
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1053/1816 FUNCTION TEST

KFF00 0B03 0AD0 KFF80 09B6 0942 0972 KF000 OBCB 08E8 0B60 KF800 0A2D 0A08 KOCOO 0805 0AFF 0836 0BF1 K0008 OBCA OBBO OC27 K0100 09B3 099C K0200 09B5 09A7 K0400 08AC 0890 09A2 K0701 09B4 099E K4000 08F4 08EE 08F0 K8000 0960 0872 087E 0881 090F 093C 09C9 0A90 0B4A LCASE ODA2 OC8E LOG 012F LOWER OBC3 OBC1 OBCF OBO5 MARK DAGE OB40 MARKA 0A88 0A8C MARKB 0A8B 0A80 MARKG OABC OA5F OA74 OACB OB5E MARKK OAE2 OC2E MARKL DABE 0A5D 0AA7 MARKN OACF OAC6 MARKP 0A9D 0A9A MARKQ 0A9B 0A99 MARKR 0492 0A8D 0A94 MARKS OAC7 OAC3 MARKX OAEF OA6A OA8A OAD1 OBF5 MARK2 OA8D OAB2 MARK3 OAA5 OAE5 OAE8 OAEE MARK4 OAA9 MARK5 OAAE OAD6 OAEO MLSCF 0809 091B 094A 09AF 0A23 0AF1 0B29 0B5A 0C7E NCAP OBC4 OBAD NEXT 0A62 0A60 NOCP OBC1 OBAE NO IN OB 4A OA 65 NO S 0006 OAB9 OAC7 OAC9 OAD8 OADA OCD6 NDSFT OBD9 ONLIN 080F 08BF 0922 0B80 0003 OA7C OA89 OACF OBD3 OCOE OCD1 OEBO OEC2 OED4 OEE6 OFOA OF1C OF2E OUT DUTWD 0A6D OA7B OA7E OA8B PAD 0007 OAAD OAB6 OADB OADC OCD7 PDSWX OC7E 0A9B OC4F OC65 OC6A OC75 OC78 OC7B OCB9 PEND OFFD 080B PID 07FF 08FD PRCON 09E3 0801 09DB 0AEF 0B15 0B51 0B56 0B6B PRDSW 0C30 0AFB 0B19 0B3C 0B4F 0B70 0B7A 0B8F 0B9E 0BBC 0C66 PRSEL 0989 0916 09CC 09FD 0AA0 PTR 000A 0874 0876 08CA 099F 0AF6 0B34 0B4D 0B53 0B68 0B76 0888 0BEA 0BEE PTRAD OC88 OAFD OBIB OB3E OB7C OB91 OBAO OC36 PTRO 0EA8 0823 08A8 09E3 0A34 0A58 0A68 0C4B 0EB0 0EB6 PTROE 081E 0826 PTRON 0EB2 PTRE DEBA 082C 08A9 DEC2 DEC8 PTR11 0829 082F OECC 0835 OED4 OEDA PTR2 PTR21 0832 0838 OEDE 083E OEE6 OEEC PTR31 083B 0841 PTR4 0EF0 0847 0EF8 0EFE PTR41 0844 084A PTR5 0F02 0850 08AD 0F0A 0F10 PTR51 084D 0853 0F14 0859 0F1C 0F22 PTR6 PTR61 0856 085C PTR7 0F26 0862 0F2E 0F34

```
IBM MAINTENANCE DIAGNUSTIC PROGRAM FOR THE 1800 SYSTEM
                                                                           PART NU. 2196366
1053/1816 FUNCTION TEST
       PTR71 085F 0865
       PTR8
             0F38
                   086B 090C 0997 09C2 0A02 0A3E 0A4B 0B0C 0CC6 0F40 0F46
       P16EF 081A 0821 082A 0833 083C 0845 084E 0857 0860 0869 08A2 0970 0973 09EF
       READY OAF5 0A62
       RED1 0083 0C10
       RELCK OC48
                   0079
       RELDV 0132 OALB OC5A OCDB
       REQDV 0131 0981 0A52 0C6F
       RESET 0910 0915
       RESTO 0A66 0A05 0A67
                  0030 0046
              0800
       RID
       ROCK OEOD OC92
       ROLL
             0E40 0C93
       KQST
             0962 0919
       RQSTC
             0981 0975 09AD
       RQSTT 0996 096D
       RQST1 0967
                  0960
       RQST2 0976 0969
       RUST3 0968 0980
       RQST5 09AD
                   0984 0985 0986 0987 0988 0989 0984 098B 098C 098D 098E 098F 0990
       RQST6
             0997
                   0991 0992 0993 0994 0995
       RQST8 0984 0964
       ROST9 09AF
       RSADR 0AA3 080C 0C2A 0CC4
       RTN
             0001
                  0802 0AA6 0C38 0CCB
       RYOER OAFA
             000E 08CF 09A8 0874 0885 0893
             0867 0863
       SEL €
       SELC1 0B70 0B66 0B6F
       SELC2 0B53 0A63 0BC0 0BC2 0BFA
       SELC3 OB5E
                  0858
       SELT
             09BA 0948 09AC 09FB
       SELT7 09C7 09CF
             OBDD
                  0808
       SLT
             0005 0ABB 0AC0 0AC2 0C04
       SPNDX 0DD5 0C90
       START
             0120
                  09B1 0A25 0AF3 0B2C 0B5C 0C80
                  0871 087D 08B8 08CE 08ED 0910 09C8 09CF 09E3 0A04 0A34 0A44 0A68
                   0A96 0A9F 0B00 0B61 0BE8 0C28 0C4B
             0A34 0A31 0A32
       SVCAD 0A31 0A09
       SWCMP 09B7
                  0946 09F9
       SWSTG 08F8
                  0908 OCED
       SWO
             0802
                  0B20
             SW2
             0804
                  0906 0920 093E 0944 09BA 09C4 09F7 OCEF
       SW3
             0805 0A75 0A81
       TACAR 0D73 0C8C 0CCF 0EA8 0EBA 0ECC 0EDE 0EF0 0F02 0F14 0F26 0F38
            OBE4 OCOE
       LRF I
       TBLIS OBEZ OBDR
       TBLIZ OBEO
                  OBDF
       TDLY2 0B27 0B32
       TDLY4 082E
                  0B27 0B2B
       THEY6 0B33
                  0822
       TEMP:
            09B8 09D2 09D3 09D5
       TEMPX 08F9
                  08AE 08B2
       TEND OCBC 0808 OCF1
       TEND1 OCC9
                  OC DA
       TEND2 OCE9 OCDD OCDE OCDF OCEO OCE1 OCE2 OCE3 OCE4 OCE5 OCE6 OCE7
       TEND3 0CDD 0962
       TERM 080A 0996 0A1E 0A57 0C5D 0C74 0CE8
       TIMEB 0808 0824
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TIMEX 0C8A 0A90 0A97 0B25 0830 0C4A 0C53 0CB4 0CB7

TIME1 0C79 0C55

TIPE 0879 0875

WRDCT OBA2 08D4 0B9A 0BE5 0C12
WRT 0008 099D 0B33 0BED
XX 0944 093D 0940

WHCH4 09DC 09D7

WHCH1 09D1 09C7 09E0 WHCH1 09D8 09CA 09D0 09DE WHCH2 09D3 09DA

END DE ASSEMBLY

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TEM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM PART NU. 2196372 PAGE 2400 FUNCTION TEST TABLE CF CONTENTS PARAGRAPH PAGE PROGRAM LOADING PROGRAM OPERATION 3.2 SPECIAL CRC CHECK OPTION 3.3 PROGRAM HALTS 3.4 3.5 PROGRAM TERMINATION COMMAND MESSAGES 4.2 DATA MESSAGE ERROR PRINTOUTS PROGRAM DESCRIPTION TEST ROUTINES COMMON SUBROUTINES EDIT PROCEDURE 1. PURPOSE MAGNETIC TAPE FUNCTION TEST (MIFNT) IS DESIGNED TO TEST EACH FUNCTION OF THE 2400 MAGNETIC TAPE SERIES FOR COMPLIANCE WITH THE PRODUCT SPECIFICATIONS. THE MTENT PROGRAM IS WRITTEN TO ACCOMMODATE SYSTEMS WITH-1 - ONE OR TWO TAPE ORIVES. 2 - ORIVES WITH 9 TRACK OR 7 TRACK READ-WRITE HEADS. IN SYSTEMS WITH TWO TAPE DRIVES. THE DRIVES CAN BE EXERCISED IN AN ASYNCHRONOUS FASHION. BECAUSE MIFNI RUNS UNDER CONTROL OF DIAGNOSTIC MONITOR, INTERACTION BETWEEN MAGNETIC TAPE DRIVES AND OTHER DEVICES CAN ALSO BE TESTED. 2. PREREQUISITES THIS PROGRAM MUST RUN UNDER CONTROL OF THE DIAGNOSTIC MONITOR. THE DIAGNOSTIC MONITOR PROGRAM USES 2,047 STORAGE WORDS, AND THIS PROGRAM USES 2.047 STORAGE WORDS. 3. USE PROCEDURE PROGRAM LOADING STANDARD LOADING PROCECURE AS DESCRIBED IN THE DIAGNOSTIC MONITOR USE PROCEOURE. ON 2400 TAPE DRIVE. 1. LOAD REEL OF TAPE 2. DEPRESS LOAD-REWIND KEY 3. OEPRESS START KEY TAPE SHOULD REWIND TO LOAD POINT, AND READY LAMP SHOULD GO ON. PROGRAM OPERATION CATE 28FE856 04110766 PROG IO 0807-#

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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2400 FUNCTION TEST

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STANDARD MOMITOR OPERATING PROCECURES APPLY.
THESE PROCEDURES ARE SUMMARIZED HERE. SEE CM USE PROCEDURE FOR DETAILS OF PARTS 1-4 BELOW.

- 1. CLEAR STORAGE
- 2. LOAD DIAGNOSTIC MONITOR
- 3. SELECT MODE OF EXECUTION
- . SELECT MONITCR CONTROL OPTIONS
- 5. SELECT PROGRAM OPTIONS FROM.

IF NO OPTIONS ARE SELECTED. THE PROGRAM WILL AUTOMATICALLY RUN ALL ROUTINES IN SEQUENCE. THIS RUN WILL BE ON BOTH DRIVES UNLESS THE EDIT CARD INDICATES THERE IS NO DRIVE I AVAILABLE.

NOTE

IM THIS MODE NO ROUTINE WILL CHECK THE ABILITY TO SENSE END OF TAPE MARKER, UNLESS THE E.O.T. MARKER IS LESS THAN 500 RECORDS FROM LOAD POINT.

TABLE O PROGRAM CONTROL FUNCTION
TABLE I ROUTINE SELECT FUNCTION (ONLY 1F LOOP ROUTINE IS DESIRED)
TABLE 2 DEVICE SELECT FUNCTION

- 6. INSTRUCT MONITOR TO EXECUTE
- 3.3 SPECIAL CRC CHECK OPTION

A SPECIAL OPTION IS AVAILABLE TO SPEED CHECKING OF THE CRC CIRCUITRY. TO USE THIS OPTION.

- A. ENTER BITS 7 (CHECK CRC), AND 10 (PRINT ONLY FIRST BAD DATA WORD) FROM TABLE 0.
- B. SELECT ROUTINE 3 FOR THE DRIVE CR PRIVES TO BE RUN. (TABLE 1)
- ON SYSTEMS WITH TWO DRIVES, IF IT IS DRLY DESIRED TO RUN QNE DRIVE, DESELECT THE CRIVE NOT TO BE RUN. (TABLE 2)
- INSTRUCT MONITOR TO EXECUTE.
- E. WAIT UNTIL THE FIRST PASS THRU TAPE IS COMPLETE. THIS IS THE WRITE PASS.
- F. DURING READING, GROUND THE DUTPUT OF THE HI CLIP AMPLIFIER FOR ONE TRACK.
- G. CHECK FOR THE FOLLOWING PRINTOUTS ON EACH RECORD READ WHILE THE HI CLIP AMPLIFIER OUTPUT IS GROUNDED.
 - 1. CORRECTABLE READ ERROR (A004)
 - 2. WRONG DATA (E007)
 - 3. RECEVERED READ ERROR (A003)
- H. THE OCCURANCE OF THE "RECOVERED READ ERROR" PRINTOUT SHOWS THE CRC CIRCUIT IS WORKING CORRECTLY.
- . REPEAT STEPS E THRU H FOR EACH TRACK.
- J. TERMINATE THE PROGRAM BY INSTRUCTING THE MONITOR TO DEEXECUTE.

TABLE O CONTROL FUNCTION

1. SET FUNCTION CC IN SENSE/PROGRAM SWITCHES O AND 1.

(AS SHOWN)

SENSE/PROGRAM .

(AS SHOWN)

(AS SHOWN)

1 2 3 4 5 6 7 • 2. SET DESIRED CONTROL OPTIONS IN DATA ENTRY SWITCHES 0-15.
• 4. PRESS CONSOLE INTERRUPT.

• C C C C C 1 1 I •

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USEC IN BOOTSTRAP MODE. (SEE SEC.3.5) .
                   1......BYPASS ALL PRINTOUTS WITH A PREFIX OF .
                        A OR C.
             1...... PRINT ONLY FIRST BAD DATA WORD.
         . 1..... THRU 6 RUN TO GOT.
         1.....CRC CHECK OPTION (SEE SECTION 3.3)
```

TABLE 1 ROUTINE SELECTION

. SET FUNCTION OL IN SENSE/PROGRAM SWITCHES O AND 1. (AS SHOWN) SENSE/PREGRAM . 2. SET PID IN SENSE/PROGRAM SWITCHES 2-7. (AS SHOWN) C 1 2 3 4 5 6 7 . 3. SET DESIREO ROUTINES IN DATA ENTRY SWS. . 4. PRESS CONSOLE INTERRUPT. . C 1 C C C 1 1 1 . S. A STARTING ROUTINE CAN BE SELECTED BY --A. ENTER STARTING ROUTINE FOR A DRIVE OR DRIVES. E. START PROGRAM RUNNING. C. ENTER ROUTINE C FOR THE DRIVE OR DRIVES. DATA ENTRY SWITCHES DESCRIPTION • C 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 • X X X X X.....ROUTINE TO BE LCOPED ON DRIVE ZERG. · · · · ENTER HEX NUMBER FROM 0 TO 11. Y Y Y Y Y ... ROUTINE TO BE LOOPEC CN DRIVE ONE.

ENTER HEX NUMBER FROM O TO 11. . NOTE 1-IF THE NUMBER ENTERED FOR A DRIVE IS ZERD-THAT DRIVE WILL NOT LOOP BUT WILL RUN ALL ROUTINES IN SEQUENCE.

. NOTE 2 THESE SWITCHES CAN BE CHANGED AT ANY TIME.

TABLE 2 DEVICE SELECTION

| • • • • • • • | (AS SHOWN) |
|---------------|---|
| | /PROGRAM • 2. SET PID IN SENSE/PROGRAM SWITCHES 2-7. (AS SHOWN) |
| C 1 2 3 | 3 4 5 6 7 • 3. SET DESIRED DRIVES IN DATA ENTRY SWS. • 4. PRESS CONSOLE INTERRUPT. |
| 1000 | C 1 1 1 • |
| | DATA ENTRY SWITCHES • DESCRIPTION |
| • | 3 4 5 6 7 8 9 10 11 12 13 14 15 • |
| | |
| | |
| NCTE | E 1-DRIVE SELECTION ENTRY IS REQUIRED ONLY IF IT IS NOT DESIRED TO RUN BOTH DRIVES. |
| NOTE | E 2-ONCE THE MONITOR BEGINS EXECUTION OF MIFNI ORIVE SELECTION CAN ONLY BE CHANGED BY RESTARTING MIFNI. |
| NOTE | E 3-IF THE SYSTEM HAS ONLY ONE DRIVE: A SPECIAL ENTRY OF *FFFF* IS MADE ON THE COIT CARD FOR DRIVE I AND THIS OPTION IS NOT USED. |

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THIS PROGRAM WILL NEVER WAIT. UNLESS THE DIAGNOSTIC MONITOR OPTION OF HALT ON ERROR IS SELECTED. SEE DM USE PROCEDURE FOR THIS HALT.

3.5 PREGRAM TERMINATION

PROGRAM IS TERMINATED IF A SELECTED DRIVE IS NOT READY. PROGRAM CAN BE MANUALLY IERMINATED IN TWO WAYS.

- 1. BY THE MONITOR DEEXECUTE OPTION. THIS OPTION SHOULD BE USED WHEN RUNNING PROGRAMS IN THE OVERLAP MODE.
- 2. BY ENTERING BIT 15 OF FUNCTION CO (TABLE O). THIS OPTION MUST BE USED WHEN RUNNING PROGRAMS IN THE EOOTSTRAP HODE.

4. PRINTOUTS

- CCMMAND MESSAGES
- CTCC CCCC (THE REST OF THE WORDS HAVE NO SIGNIFICANCE) ORIVE C IS SELECTED TO BE RUN BUT IS NOT READY.
- C7CC CCC1 (THE REST OF THE WORDS HAVE NO SIGNIFICANCE) DRIVE 1 IS SELECTED TO BE RUN BUT IS NOT READY.
- CTCC CCC2 (THE REST OF THE WORDS HAVE NO SIGNIFICANCE) NO DRIVE IS SELECTED TO BE RUN.

DATA MESSAGE

FIRST LINE

CCEFGHI

SECOND LINE

CCCX XXXX XXXX XXXX PROGRAM HAS COMPLETED ONE PASS. ON THE ORIVE INCICATED.

A. MESSAGE NUMBER B. ROUTINE NUMBER C. RTN ACRS C. UNIT NUMBER E. NUMBER CF PROG PASSES

I. TOTAL NUMBER OF ERASES J. TOTAL NUMBER OF PASSES THRU TAPE K. UNIT NUMBER

C. NUMBER OF UNRECOVERABLE WRITE ERRORS

L. NUMBER OF RECOVERED READ ERRORS M. NUMBER OF RECOVERED WRITE ERRORS N. NUMBER CF UNRECOVERABLE READ ERRORS

F. TOTAL NUMBER OF WRITES C. TOTAL NUMBER OF READS F. TOTAL NUMBER OF REWINDS

ERRCR PRINTOUTS

ALL PRINTOUTS PREFIXED 'A' CAN BE BYPASSED BY SWITCH 13 OF FNC. 00.

RTN RTN UNIT REC ERR NC. ADDRS NC. NO. CTRL C7CC ACC1 XXXX XXXX CCCX XXXX YYRR RECOVERED WRITE ERROR. . ERROR CONTROL IS THE NUMBER OF RETRYS ON THIS RECORD PRIOR TO RECOVERY. NUMBER OF RETRYS IS EQUAL TO YY MULTIPLIED BY TEN. PLUS RR.

DSW RECEIVED CTCC ACO2 XXXX XXXX CCCX XXXX XXXX DSW SHOWS CORRECTABLE WRITE ERROR.

CONTROL C7CC ACO3 XXXX XXXX CCCX XXXX YYRR RECOVERED READ ERROR.

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ERROR CONTROL IS THE NUMBER OF RETRYS ON THIS RECORD PRICE TO RECOVERY. NUMBER OF RETRYS IS EQUAL TO YY MULTIPLIED BY TEN.

> CSW RECEIVED

CTCC ACC4 XXXX XXXX CCCX XXXX XXXX OSW SHOWS CORRECTABLE READ ERROR.

> ERRCR CONTRCL

C7CC ACC5 XXXX XXXX CCCX XXXX XYXX

TRIED TO BACKSPACE PAST CLEANER, BUT REACHED LOAD POINT. ERROR CONTROL IS THE TOTAL NUMBER OF TIMES THE PROGRAM TRIED TO BACKSPACE PAST THE TAPE CLEANER. (ON THIS RECORD)

EXPEC-REC. TED NC. REC. REAC

C700 ACG6 XXXX XXXX CCCX XXXX XXXX RECORD ID SHOWS WRONG RECORD READ

PRINTOUTS PREFEXED BY "E" CAN BE BYPASSED CNLY THROUGH THE BIAGNOSTIC MCNITOR 'BYPASS ERRCR PRINT' SWITCH OPTION.

RIN RIN UNIT NC. ADDRS NC.

CTCC ECOL XXXX XXXX CCCX COUBLE INTERRUPT OCCURRED. (REFER TO ERRCR NOTE)

> FNC AND

C7CC ECC2 XXXX XXXX CCCX XXXX

FUNCTION CR MODIFIER WAS ILLEGAL. (REFER TO ERROR NOTE)

REC. CSW

C7CC ECG3 XXXX XXXX CCCX XXXX XXXX

DSW SHOWS UNCORRECTABLE WRITE ERRCR. (REFER TO ERRCR NOTE)

C7CG ECC4 YXXX XXXX CCCX XXXX XXXX

DSW SHOWS UNCORRECTABLE READ ERROR, ICO TRIES ON A CORRECTABLE READ ERROR OR WRONG RECCRD READ HAVE FAILED. (REFER TO ERROR NOTE)

C7CC ECC5 XXXX XXXX CCCX

THE TAPE DRIVE WAS NOT AVAILABLE FOR TOO LONG A PERIOD. THE PROGRAM IS LOOPING. (REFER TO ERROR NOTE)

> FNC + MOD

C7CC ECC6 XXXX XXXX CCCX XXXX

LOST INTERRUPT (REFER TO ERROR NOTE)

REC. WD.EXPEC-RECEIVED NO. NC. TED DATA

DATA

GATA READ DID NCT COMPARE WITH DATA WRITTEN.

SINCE THE FIRST WORD OF DATA ON ALL RECORDS IS A RECORD

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I.C., THE FIRST DATA WORD CHECKED BY THE COMPARE ROUTINE IS WORD 2. REFERENCE PRINTOUT ACOS FOR RECORD I.D. PRINTOUT.

REC. CSW

NC. C7CO ECC8 XXXX XXXX CCCX XXXX XXXX

NC END OF TABLE INTERRUPT WHEN CHAINING.

REC. CSW

MC.

C7CO ECO9 XXXX XXXX CCCX XXXX XXXX

NO END OF OPERATION INTERRUPT AFTER END OF TABLE INTERRUPT WHEN CHAINING.

REC. CSW

NC.

CTCC ECCA XXXX XXXX CCCX XXXX XXXX NO COMMAND REJECT INTERRUPT WHEN EXPECTED.

REC. CSW

NO.

C7CC ECCB XXXX XXXX CCCX XXXX XXXX

WRCNG LENGTH RECORD DID NOT OCCUR AS EXPECTED.

۸0.

C7CO ECCC XXXX XXXX CCCX XXXX XXXX

STERAGE FROTECT VIOLATION DIE NOT CCCUR WHEN EXPECTED.

REC. WC.EXPEC- WC. NO. CT. TEC FOUND

WC.

C7CO ECOD XXXX XXXX GCOX XXXX XXXX XXXX XXXX

STORAGE PROTECTED NO. WAS DESTROYED BY READ.

C7CO ECCE XXXX XXXX CCCX

PREGRAM STOP DID NOT OCCUR.

REC. CSW

C7CC ECCF XXXX XXXX CCCX XXXX XXXX

WRONG LENGTH RECORD DID NOT OCCUR.

EXPEC- WD. TEC CT.

WD. RECEIVED

CT.

C7CO ECIC XXXX XXXX CCCX XXXX XXXX WORD COUNT SENSED WAS NOT AS EXPECTED.

REC. CSW

NC. C7CC EC11 XXXX XXXX CCCX XXXX XXXX

REACING TAPE MARK DID NOT SET DSW BIT.

EXPEC-RECEIVED TEC T.M.

T.M. DATA

DATA

C7CG EC12 XXXX XXXX CCCX XXXX XXXX

READING TAPE MARK BROUGHT IN INCORRECT DATA.

REC. DSW NO.

C7CC EC13 XXXX XXXX CCCX XXXX XXXX COULD NOT CHANGE DENSITY ON 7 TRACK DRIVE.

REC. DSW

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CTOG EC14 XXXX XXXX CCCX XXXX XXXX NG LEGAL BIT ON AT INTERRUPT. (REFER TO ERROR NOTE)

> EXPEC- WD. TED CT. WD. RECEIVED

C7CC EC15 XXXX XXXX CCCX XXXX XXXX UNABLE TO LDAD WORD COUNTER PROPERLY.

***** ERRCR NOTE *****

THESE ERROR PRINTOUTS WILL CAUSE THE PROGRAM TO TERMINATE THE ROUTINE THAT CAUSED THE ERROR AND START THE NEXT SECUENTIAL ROUTINE . IUNLESS RUNNING IN THE LOOP ROUTINE MODE .

5. CCMMENTS

DN ANY READ OPERATION PERFORMED BY THIS PROGRAM. THE POSSIBILITY EXISTS, OF BAD PARITY COMING FROM THE TAPE. DUE TO BIT PICKUP DR DROPOUT WITHIN THE CHANNEL ITSELF. IF THIS OCCURS, THE WORD WILL ENTER MEMORY WITH BAD PARITY. THIS ERROR WILL NOT BE DISCOVERED UNTIL SOME TIME LATER, WHEN THE WORD IS BROUGHT OUT OF MEMORY FOR COMPARISON WITH DATA EXPECTED. AT THIS TIME AN INTERNAL ERROR INTERRUPT WILL OCCUR. BUT AM INDICATOR WILL BE SET TO BYPASS THE ERROR WAIT IN THE DIAGNOSTIC MONITOR. THE ONLY INDICATION OF THIS TROUBLE WILL BE A PRINTOUT OF INCORRECT DATA WITH NO PRECEDING RECOVERABLE READ PRINTOUT. THIS POSSIBILITY SHOULD BE KEPT IN MIND WHEN EXAMINATION OF RRIMTOUTS IS MACE.

THIS PROGRAM WRITES. AS THE FIRST WORD OF DATA ON ALL RECORDS. A RECORD 1.D. WHEN A RECORD IS READ THE RECORD I.C. IS CHECKED AGAINST EXPECTED. IF THESE ARE NOT THE SAME PRINTOUT ACCE WILL OCCUR. THE REMAINING DATA WORDS ARE THEN CHECKED AND IF NOT AS EXPEXTED THE PRINTOUT ECOT WILL OCCUR. IT SHOULD BE REALIZED THEREFORE THAT RECORD I.D. IS CONSIDERED BY THE PROGRAM TO BE DATA WORD 1 AND THE REMAINING DATA IS WORDS 2 THROUGH THE NUMBER OF WORDS USED BY

NOTE

WHEN THE RECORD I.C. IS FOUND TO BE IN ERROR. THE EXPECTED I.C. IS SET EQUAL TO THE RECEIVED I.D. IN AN EFFORT TO SYNC THE PROGRAM TO THE ACTUAL RECORD NUMBER IT IS AT CN THE TAPE. THIS WILL ALLOW RECOVERY AND CONTINUATION OF THE PROGRAM EVEN IF RECORDS ARE INTERMITIENTLY SKIPPED DUE TO HARDWARE TROUBLE.

5.I PROGRAM DESCRIPTION

THE MAGNETIC TAPE FUNCTION TEST CONSISTS OF A MAGNETIC TAPE MONITOR ROUTINE. A SERIES OF COMMON MAGNETIC TAPE SUBROUTINES AND A SERIES OF INDIVIDUAL TESTS.

THERE ARE FIVE IMPORTANT TABLES AROUND WHICH ALL ROUTINES ARE ORIENTED.

> DST 0 AND DST I - MAGNETIC TAPE DEVICE STATUS TABLE. ONE FOR FACH TAPE DRIVE. COMMON - CONTAINS COMMON CONSTANTS AND COMMON ROUTINE CALLS. DRCTB AND DRITE - CONTAINS *CONSTANTS* AND *RETURNS* UNIQUE TO EACH DRIVE.

-2 TEST ROUTINES

EEC HF X RTN = RTN = DESCRIPTION

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INTITIAL CONDITIONS CHECK
                 1. REWIND
                 2. CHECK FOR LDAD POINT
                 3. CHECK FOR READY.
                WRITE-BACKSPACE-READ 5GO RECORDS OR TO END OF TAPE USING 2D WOS
                PER RECORD AND ALL ONES PATTERN.
                WRITE-READ TESTS. STARTING AT LOAD POINT WRITE 5GO RECORDS OR TO
                ECT. REWIND, READ ALL RECORDS WRITTEN AND CHECK DATA.
                 ROUTINES 3 THROUGH 6 HAVE THEIR RECORD TO AS THE FIRST WORD OF
                 EACH RECORD.
                20 WORDS PER RECORD USING FLOATING ZERD PATTERN.
                20 WORDS PER RECERD USING FLOATING DNES PATTERN.
                CE WORDS PER RECCRD USING ALL ZEROS RATTERN.
                C8 MORDS PER RECCRO USING ALTERNATE CHES PATTERN.
                SPECIAL TESTS
               MRITE USING CHAINING, READ BACK AND CHECK DATA.

CAUSE COMMAND REJECT BY ISSUING A COMMAND TO A BUSY DRIVE.

CAUSE COMMAND REJECT BY ISSUING A COMMAND TO THE UNSELECTED
  IC
               CAUSE COMMAND REJECT BY PACKSPACING INTO LOAD ROINT.
               CAUSE COMMAND REJECT BY REWINDING WHEN AT LOAD POINT.
               FCRCE SPY STOP BY READING INTO STORAGE PROTECTED LOCATIONS.
  12
        C
               ALSO CHECK FOR WRONG LENGTH RECORD.
FORCE PROGRAM STOP BY ISSUING A SENSE WITH BIT 12 TO A
 13
               MOVING DRIVE. ALSO CHECK WRONG LENGTH RECORD, AND PROPER
               WORD COUNTER LOADING.
               FORCE WRONG LENGTH RECORD BY READING MORE WORDS THAN WERE
 14
        Ε
               WRITTEN. CHECK THAT WORD COUNT WAS PROPERLY LOADED AND STEPPED.
               WRITE AND READ A TAPE MARK. CHECK BOTH CATA AND SENSE WGRD.
 15
               7 TRACK FEATURE TESTS
 Ιć
       1 C
               THE FIRST WORD OF EACH RECORD IS THE RECORD ID AND EGES NOT
               CONTAIN THE PATTERN WORD.
                     1. WRITE ONE RECORD OF 2G WORDS AT 556 BPI. 2 BYTES PER
                          HORE AND ODD PARITY. BACKSPAGE, READ THE RECORD AND
                          CHECK THE DATA.
                     2. WRITE DNE RECORD OF 20 WORDS AT 556 BPI+ 2 BYTES PER
                          WORD AND EVEN RARITY. BACKSPACE, READ THE RECORD AND
                         CHECK THE DATA.
WRITE ONE RECORD OF 20 WORDS AT 556 BPI, 3 BYTES PER
                          WORD AND COD PARITY. BACKSPACE, READ THE RECORD AND
                         CHECK THE DATA.
                         WRITE ONE RECORD OF 2G WORDS AT 556 BPI. 3 BYTES PER
                         HORD AND EVEN PARITY. BACKSPACE, READ THE RECORD AND
                         CHECK THE DATA.
                        BACKSPACE AND READ AT 200 BPI. 3 BYTES PER WORD AND EVEN
                         PARITY. CHECK THE DSW FCR TAPE DATA ERROR. OR COMPLETE.
                         TAPE DIAGNOSTIC ERRCR AND WRONG LENGTH RECORD.
                        WRITE ONE RECORD OF 20 WORDS AT 200 BPI, 3 BYTES PER WORD AND EVEN PARITY. BACKSPACE, READ THE RECORD AND
                         CHECK THE DATA.
             FORCE WRONG LENGTH RECORD BY READING FEMER WORDS THAN WERE
17
      11
             WRITTEN. CHECK FOR PROPER LOADING AND STEPPING OF THE WORD
          CCHMCN SUBROUTINES
          EACH SUBROUTINE ASSUMES THAT INDEX REGISTER 1 CONTAINS THE BASE ADDRS
          OF THE DRIABLE, INDEX REGISTER 2 CONTAINS THE BASE ADDRESS OF THE
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PROPER DST TABLE. AND XR3 THE BASE ADDRESS OF THE COMMON TABLE.

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IEM MAINIENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM PART NO. 2196372 PAGE 2400 FUNCTION TEST NAME CALL ESP USE- BACKSPACE ONE TAPE RECORD CKAVL USE- CHECKS THE DRIVE AVAILABLE SMITCH FOR BOTH DRIVES. IF EITHER SWITCH IS ECUAL TO ONE THE ROUTINE LOOPS THROUGH THE DIAGNOSTIC MCNITOR. THE ROUTINE RETURNS TO THE CALLING ROUTINE WHEN BOTH ORIVE AVAILABLE SWITCHES ARE EQUAL TO ZERC. CKESY ESI 3 38 USE- CHECKS THE DRIVE BUSY SWITCH FOR BOTH DRIVES. IF EITHER SWITCH IS EQUAL TO ONE THE ROUTINE LOOPS THRU THE MONITOR. THE ROUTINE CCUNTS EACH MONITOR REENTRY AND IF THE COUNT EXCEEDS A MAXIMUM. LOST INTERRUPT IS PRINTED. THE ROUTINE RETURNS TO THE CALLING ROUTINE WHEN BOTH SKITCHES ARE COUAL TO ZERO. CCMCC ESI 3 5C USE- A COMMON SET UP ROUTINE WHICH-BRANCHES TO CKESY ROUTINE. ı. SETS THE DRIVE BUSY SWITCH TO ONE. BRANCHES TO CKAVL ROUTINE. SETS THE DRIVE AVAIL. SWITCH TO ONE. SETS THE HEXADECIMAL CONSTANT OF 4014 AS THE WORD COUNT IN THE 1/6 AREA. SETS THE DECIMAL CONSTANT OF 20 AS THE WORD COUNT IN OST TABLE POSITION 15. SETS THE AREA COCE AND DRIVE SELECTION CONSTANT FOR THE INTERRUPT ROUTINES USE. RETURNS TO THE CALLING ROUTINE. CCMO1 851 3 53 USE- A COMMON SET UP ROUTINE WHICH-1. BRANCHES TO CHAVE ROUTINE. SETS DRIVE AVAIL. SW. TO CHE SETS THE HEXADECIMAL CONSTANT OF 4014 AS THE WORD COUNT IN THE I/C AREA. SETS THE DECIMAL CONSTANT OF 20 AS THE WORD COUNT IN DST TABLE POSITION 15. SETS THE AREA CODE AND DRIVE SELECTION CONSTANT FOR USE BY THE INTERRUPT ROUTINE. RETURNS TO THE CALLING ROUTINE. CCMC3 851 3 73 DESIRED FUNCTION AND MOCIFIER MUST BE IN THE A REG. USE- A COMMON SET UP ROUTINE WHICH-STORES FUNCTION AND MODIFIER IN THE DST TABLE AT POSITIONS 2 BUILDS THE ICCC CONTROL WORD. GETS THE KORD COUNT FROM DST TABLE POSITION 15. ADDS A NO END OF TABLE INTERRUPT BIT AND SETS IT IN THE I/O AREA. SETS THE RECORD COUNT FROM DST TABLE POSITION TO AS THE FIRST DATA HORD IN THE I/O AREA. SETS THE DRIVE BUSY SWITCH TO ONE. SETS THE AREA COCE AND DRIVE SELECTION CONSTANT FOR USE BY THE INTERRUPT ROUTINE. ISSUES THE COMMAND TO THE TAPE DRIVE. EXITS TO THE DIAGNOSTIC MONITOR. CSh 851 3 32 USE- SENSES DSW AND PLACES DSW INTO THE ACCUMULATOR BSI 3 29 USE- TAPE ERASE EXIT

CLEARS DRIVE AVAILABLE SWITCH AND RETURNS TO ME MON.

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IEM MAINTENANCE CLAGNESTIC PREGRAM FOR THE 1800 SYSTEM 24CC FUNCTION TEST MER BSI 3 11 CC MESSAGE ID CC LINE = AND FORM = USC- SETS UP TABLE TO BE PRINTED AND CALLS ON MONITOR ERROR ROUTINE. MLC BS 1 3 C8 CC MESSAGE ID CC LINE = AND FORM = USE- SETS UP TABLE TO BE PRINTED AND CALLS ON MONITOR LOG ROUTINE. MRCC BSI 3 44 USE- THIS ROUTINE DETAINS THE PATTERN WORD FROM THE PROPER DST TABLE TO BC COMPARED WITH THE DATA READ. THE STARTING LOCATION IS SPECIFIED BY THE I/C ADDRESS DETAINED FROM THE DST TABLE. THE ROUTINE ROUTINE (MER) IS ENTERED. MRSC BSI 3 47 CC PATTERN WORD USE- SET THE CORE LOCATIONS IN THE I/C AREA TO THE PATTERN SPECIFIED BY THE CALLING SEQUENCE.

CONTINUES UNTIL THE NUMBER OF MORCS SPECIFIED IN THE DST WORD COUNT HAVE BEEN COMPARED. IF A NONCOMPARE IS FOUND, THE ERROR

MII INTERRUPT ROUTINE USE- SENSES THE DSW. FINDS I/C ROUTINE THAT INITIATED I/C OPERATION AND SETS UP TO RETURN TO THE CPERATION COMPLETE SECTION OF THE SELECTED I/C ROUTINE. ALSO SENSES AND SAVES THE WORD COUNTER AND CLEARS DRIVE BUSY SWITCH.

RET BSI 3 20 EC FORMAT (C-2)

> C = FLOATING ZERGS 1 = FLOATING ONES 2 = ALL ONES, ALL ZEROS CR ALTERNATING ONES USE- READ MAGNETIC TAPE ROUTINE. NUMBER OF WORDS TO BE READ AND LOCATION OF INPUT AREA APE TAKEN FROM THE DST TABLE. AFTER READ IS COMPLETE, THE RIN ENTRS RIN PROD TO CHECK DATA READ.

RNE USE- REWINCS THE UNIT SPECIFIED BY INDEX REGISTER 1.

851 3 SC USE- SETS OR SELECTION FOR USE BY THE INTERRUPT ROUTINE.

STPST BSI 3 35 LISE- PASSES CONTROL TO THE LOCATION SPECIFIED IN THE CALLING SEQUENCE. THE PASSING OF CONTROL IS DONE BY WAY OF THE DIAGNOSTIC MONITOR'S MLSCF TABLE. THE ROUTINE USES A PUSH UP ENTRY TECHNIQUE.

USE- WRITES A TAPE RECORD. THE LOCATION OF THE OUTPUT AREA AND NUMBER OF WORDS TO BE WRITTEN ARE TAKEN FROM THE PROPER DST TABLE.

USE- A TAPE MARK IS WRITTEN ON THE UNIT SPECIFIED BY INDEX REGISTER 1.

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6 APPENDIX

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2400 FUNCTION

6.1 EDIT PROCEDURE

THE FOLLOWING EDIT PROCEDURE IS FOR CARD INPUT. THE EDIT PROCEDURE FOR PAPER TAPE INPUT IS LOCATED IN THE PAPER TAPE EDIT UTILITY PROCRAM DOCUMENTATION. THE PROPER EDIT CARDS MUST BE THE LAST CARDS IN THIS PROGRAM DECK. THE FOLLOWING FORMS ARE PROVIDED TO AID IN MANUALLY PREPARING THESE EDIT CARDS OR UPDATING EXISTING EDIT CARDS. IF IT IS NECESSARY TO PREPARE OR MODIFY EDIT CARDS, FILL IN THE NECESSARY DATA IN THE FORMS PRIOR TO PUNCHING THE CARDS. CARD COLUMNS THAT ARE SHADED SHOULD BE LEFT BLANK. DDEF STANDS FOR DEVICE DEFINITION EDIT FIELD. IT INCLUDES:

1. THE INTERRUPT LEVEL ASSOCIATED WITH THIS DEVICE (USE HEX NOTATION, 00-17).

2. THE ILSW BIT POSITION ASSOCIATED WITH THIS DEVICE (USE HEX NOTATION, 0-F).

3. THE CHANNEL ASSIGNED TO THIS DEVICE (0-8). IF THIS IS A DPC DEVICE, PUNCH AN "F" IN THE CARD COLUMN.

THE LAST EDIT CARD IS THE "END EDIT CARD". THE INFORMATION IN THIS CARD INCLUDES: 1. AN "E" IN COLUMN 1.

2. THE PID FOR THIS PROGRAM (COL. 2-3).

| | ENTRY 1 3. A TERMINATOR WORD OF "FFFF" (COL. 7-10). |
|--|---|
| | DDEF ENTRY 2 ENTRY 3 |
| PROGRAM ID CARD SEQUENCE NUMBER NUMBER OF EDIT ENTRIES | INTERRUPT LEVEL (HEX) ILSW B IT (HEX) CHANNEL (OR F) CHANNER OF TRACKS - DR IVE O 0000 = 9 TRACKS 0001 = 7 TRACKS 0000 = 9 TRACKS 0001 = 7 TRACKS 0001 = 7 TRACKS |
| COLUMN 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 | 6 17 18 19 20 21 26 31 31 36 41 46 51 51 56 56 56 |
| CARD 0 E 0 7 0 0 E D 0 0 0 0 0 3 F | |
| CAMP 0 E 0 7 0 0 E D 0 0 0 0 3 | 30/2/014/30/01/01/01/01/01/01/01/01/01/01/01/01/01 |
| END E 07 00 F F F F | |
| | |
| | |
| | |

CARD O MUST CONTAIN THE FULL 3 ENTRIES. IF YOUR SYSTEM HAS ONLY ONE DRIVE, ENTER "FFFF" FOR DRIVE ONE AND THE CORRECT ENTRY FOR DRIVE O. CARD END IS THE "END EDIT CARD". PUNCH EXACTLY AS IS SHOWN.

NOTE: ONLY TWO DRIVES MAY BE RUN AT A TIME WITH THIS PROGRAM.

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| | | | | | HTTC IS MTIVE | CET SENSE UD | 90700700 |
|---------------------------------|-------------------------------|----------------------------|----------------------|---|-------------------------|----------------------------|-------------------------------|
| 07FF | ORG *&2047 | | 80700020 | 0836 0 C042 | MTIC LD MTIX1 STO 28 | GET SENSE WD SET IN DST | 80700700 80700710 |
| | * | | 80700030 | 0837 0 D208 0838 0 E041 | AND MTIX2 | CK FOR LEGAL INT | 80700720 |
| | * E011 | ATE TABLES | 80700040 80700050 | 0839 1 4018 0873 | BSC L MTIAC | | 80700730 |
| | * | ATE TABLES | 80700050 | 0037 1 1010 0070 | * | | 80700740 |
| | * | | 80700070 | | * | ENSE WD CTR | 80700750 |
| 012C 0 | BEGIN EQU 300 | | 80700080 | | * | | 80700760 |
| 012D 0 | START EQU BEGINEL | | 80700090 | 083B 0 C045 | MTIAD LD MTDSW | .1 | 80700770 |
| 012E 0 | END EQU START&1 | | 80700100 | 083C 0 F042 | EOR SWC | | 80700780 |
| 012F 0 | LOG EQU END&1 | | 80700110 | 083D 0 D043 | STO MTDSW | | 80700790 |
| 0130 0 | ERROR EQU LOG&1 | | 80700120 | 0B3E 0 0B41 | XIO MTDSW | ISSUE SENSE | 80700800 80700810 |
| 0131 0 | REQDV EQU ERROR&1 | | 80700130 | 083F 0 D205 | STO 2.5 | SAVE WD CT | 80700813 |
| 0132 0 | RELDV EQU REQDV&1 | | 80700140 | | * | DETERMINE MLSCF ENTRY | 80700830 |
| 0133 0 D7FF 0 0700 | CKCR EQU RELDV&1 PID DC /0700 | PROG ID | 80700150 80700160 | | * | PETERITATE NEGOT EVIN | 80700840 |
| 0800 0 0000 | RID DC 0 | RDUTINE NUMBER | 80700170 | 0840 0 C202 | MTIT LD 22 | GET FUNCTION | 80700950 |
| 0801 0 0000 | RAD DC 0 | ROUTINE ADRS | 80700190 | 0841 0 1005 | SLA 5 | | 80700860 |
| OBD2 O OODO | SWO DC 0 | SW FNC DO | 80700190 | 0842 0 1B0D | SRA 13 | | 80700870 |
| 0803 0 0000 | SW1 DC 0 | 01 | 80700200 | 0843 0 DOOA | STO MTICL | | 80700880 |
| 0804 0 0000 | SH2 DC 0 | 10 | 80700210 | 0844 0 9124 | S 1 36 | SUB ONE | 80700890 |
| 0805 0 0000 | SW3 DC 0 | 11 | 80700220 | 0845 0 4818 | BSC &- MDX SPRT1 | WAS FNC # 1 YES | 80700900 80700910 |
| 0806 1 08AC | IPA DC MTRST | INIT ADRS | 80700230 | 0846 0 7019 0847 1 9400 0975 | S L MTTWO | | 80700920 |
| 0807 1 08AC 0808 1 08CD | LPA DC MTRST EPA DC MTEND | LOOP ADRS ENO PROG ADRS | 80700240 80700250 | 0849 0 4B18 | BSC &- | WAS FNC 4 | 80700930 |
| 0809 0 0000 | MLSCF DC 0 | LOST INT VEC | 80700260 | 084A 0 701F | MDX MTICL | YES | 80700940 |
| 080A 0 0000 | DC 0 | INTERRUPT ENTRY ONLY | 80700270 | 084B 0 1010 | SLA I6 | CLEAR FNC | 80700950 |
| 0808 0 0000 | DC 0 | INTERRUPT ENTRY ONLY | 80700280 | 0B4C 0 D202 | STO 22 | | 80700960 |
| 0800 0 0000 | DC 0 | MAIN LINE ENTRY ONLY | 80700290 | | * | TET MICOS SHEDI | 80700970 |
| 080D 0 00D0 | DC 0 | MAIN LINE ENTRY ONLY | 80700300 | | * | SET MLSCF ENTRY | 80702980 80700990 |
| 080E 0 FFFF | TERM DC /FFFF | UTCU LIMIT | 80700310 | 084D 0 6700 0000 | MTIC1 LDX L3 0 | IX 3 # FNC | 80701000 |
| 080F 1 0FFA 081D D 000D | DC P END DC 0 | HIGH LIMIT | 80700320 80700330 | 084F 1 C700 0882 | LD L3 FNCTB | GET ENTRY | 80701010 |
| D811 0 0000 | DC 0 | | 80700340 | 0851 0 D003 | MTIR1 STO MTIR | SAVE | 8 07 01020 |
| 0812 0 0D00 | DC 0 | | 80700350 | 0852 1 6700 0974 | LDX L3 MTTWO | IX3#ADRS COMMON TBL | |
| D813 0 0000 | DC 0 | | 90700360 | | * | | 80701040 |
| 0814 0 0000 | DC o | | 80700370 | 0854 0 4357 | BSI 3 87 | GO SET MLSCF ENTRY | SRC 80701050 |
| 0B15 D 0000 | EDIT DC 0 | INTR LVL, ILSW, CH | 80700380 | 0855 0 0000 | MTIR DC 0 | | 80701060 80701070 |
| 0816 D 0000 | EDIT1 DC 0 | NUMBER TRACKS DR 0 | 80700390 | 0856 0 1010 08 5 7 0 D21A | SLA 16 STD 226 | SET IN DR BUSY SW | 80701070 |
| 0817 0 ODOD | EDIT2 DC 0 | NUMBER TRACKS DR 1 | 80700400 80700410 | 0858 0 D073 | STO ACMT | CLEAR DR SEL | 80701090 |
| | * | | 80700420 | 0859 0 DOAF | STO MLSCF | CLEAR LOST INT VEC | 80701100 |
| | * THI | S IS THE INTERRUPT RTN | 80700430 | 085A 0 6500 0000 | MTIS LDX L1 0 | RESTORE IX REGS | 80701112 |
| | * | | 80700440 | 085C 0 6600 0000 | LDX L2 O | | 80701120 |
| | | *** *** *** *** *** | 80700450 | 085E 1 4C80 081A | BSC I MTI | EXIT | IX 80701130 |
| 0818 0 0000 | INTSW DC 0 | NTRPT PENDING SW | 80700460 | | . | FUNCTION WAS DNE | 80701140 80701150 |
| 0819 0 0D00 | MTIO DC O | AREA CODE STORAGE | 80700470 80700480 | | * | ONE TION WAS DIVE | 80701160 |
| 081A 0 0000 081B 0 693F | MTI DC 0 STX 1 MTIS&1 | SAVE INDEX REGS | 80700490 | 0860 1 C400 09C4 | SPRT1 LD L SPFNC | &1 GET 0200 | 80701170 |
| 081C D 6A40 | STX 2 MTIS&3 | Suff INDEX WEDS | 80700500 | 0862 0 D202 | STO 2 2 | SET FNC # 2 | 80701180 |
| D81D 1 6500 0909 | LDX L1 DR1TB | SET IXING = DR 1 | 80700510 | 0863 0 CO15 | LD MTIXI | GET SENSE WORD | 80701190 |
| 081F 1 6600 0956 | LDX L2 DST1 | * | 80700520 | 0864 0 D219 | STO 2 25 | SET IN DST | 80701200 |
| 0B21 0 1010 | SL A 16 | CLEAR A REG | 80700530 | 0865 0 1009 | SLA 9 | CHECK OP COMPLETE | 80701210 80701220 |
| 0822 0 DOF5 | STO INTSW | RESET NTRPT SW | 80700540 | 0866 1 4C28 0840 | BSC L MTIT, | 26 | 80701230 |
| 0823 0 C05C | LD MTDSW | BUILD SENSE DSW | 80700550 | 0868 0 DOAF 0869 0 70F0 | STD INISW MDX MTIS | | 80701240 |
| 0824 1 F4DD 08CC 0826 0 D05A | EOR L ACMT STO MTDSW&1 | SAVE | 80700560 80700570 | 000000 | * | | 80701250 |
| 0827 0 0858 | XIO MTDSW | SENSE-NON RESETABLE | 80700580 | | * | FUNCTION FOUR ENTRY | 80701269 |
| 0B28 0 C058 | LD MTDSW&1 | | 80700590 | | * | | 80701270 |
| 0B29 0 F124 | EOR 1 36 | | 80700600 | 086A 0 D202 | MTICL STO 2 2 | CLEAR FNC | 80701280 |
| 082A 0 D056 | STO MTDSW&1 | | 80700610 | 086B 0 C203 | LD 23 | GET MODIFIER | 80701290 |
| 0828 0 0854 | XIO MTDSW | SENSE-RESETABLE | 80700620 | 086C 0 E00E 086D 0 D001 | AND MTIX3 Sto Mtiel | | 80701300 80 70 1310 |
| 082C 0 D04C | STO MTIXL LD L ACMT | SAVE | 80700630 80700640 | 086E 0 6700 0000 | MTIE1 LDX L3 0 | IX 3 # MOD | 80701310 |
| 082D 1 C400 08CC 082F 0 1805 | LD L ACMT Sra 5 | GET DR SELECTION | 80700650 | 0870 1 C700 088A | LD L3 FNCCL | GET ENTRY | 80701330 |
| 0830 1 4004 0836 | BSC L MTIC,E | BRANCH = DR 0 | 80700660 | 0872 0 70DE | MDX MTIR1 | | 80701340 |
| 0832 1 6500 08D6 | LDX L1 DROT8 | SET IXING TO DR O | 80700670 | | * | | 80701350 |
| 0834 1 6600 0939 | LDX L2 DSTO | | 80700689 | | | HAD AN ILLEGAL INTRRUPT | 80701360 |
| | * | | 80700690 | | * | | 80701370 |
| | | | | | | | |

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2400 FUNCTION TEST

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| 0 878 | | | | | | | |
|--------------|--------------|-------|------|----------------|------------------------|-----|-------------------|
| | | MTIAC | LO | MTIX4 | GET ENTRY | | 80701380 |
| 0874 0 | 70DC | | MOX | MTIR1 | | | 80701390 |
| | | * | | | | | 80701400 |
| | | * | | RETU | RN TO PRINT DN ILLEGAL | | 80701410 |
| | | * | | INTE | RRUPT | | 80701420 |
| | | * | | | | | 80701430 |
| 875 0 | 430B | MTIAE | BSI | 3 11 | GO TO PRINT VIA MER | SRC | 80701440 |
| 876 0 | E014 | | DC | /E014 | ID 14 | | 80701450 |
| 877 0 | | | DC | /0 0 02 | LINE 0 - FORM 2 | | 80701460 |
| 878 0 | 7020 | | MOX | DBIN1 | GD TO RTN EXIT | | 80701470 |
| | | * | | | | | 80701480 |
| | | * | | CONS | TANTS | | 80701490 |
| | | * | | | | | 80701500 |
| 879 0 | | MTIX1 | OC | 0 | SENSE WO STDRAGE | | 80701510 |
| 87A 0 | | MTIX2 | _ | /3040 | LEGAL INT CK | | 80701520 |
| 87B 0 | | MTIX3 | | /0007 | MODIFIER SAVE | | 80701530 |
| 87C 1 | | MTIX4 | OC | MTIAE | | | 80701540 |
| 87E | 0000 | | BSS | E 0 | | | 80701550 |
| 87E 0 | | SELSW | | 0 | | | 80701560 |
| 87F 0 | | SWC | OC. | /0011 | SENSE WD CTR MDO | | 80701570 |
| 880 0 | | MTDSW | | /0700 | SENSE IDCC | | 80701580 |
| 881 0 | 0000 | | DC | 0 | | | 80701590 |
| | | * | | | | | 80701600 |
| | | * | | FUNC | TION TRANSFER VECTORS | | 80701610 |
| | | * | | | | | 80701620 |
| 882 1 | | FNCTB | | DBINT | 000 # DBL INTRPT | | 80701630 |
| 883 1 | | | DC | SPRT1 | 001 # EXPECT 2 INTR | | 80701640 |
| 884 1 | | | DC | SPINT | 010 # SPECIAL RETUR | V | 80701650 |
| 885 1 | | | DC | MTIER | 011 # ERROR | | 80701660 |
| 886 1 | | | DC | MTIER | 100 # ERROR | | 807 0 1670 |
| 887 1 | 0A73 | | DC | WRTI | 101 # INIT WRT | | 80701680 |
| 888 1 | | | OC | RDT 12 | 110 # INIT RD | | 80701690 |
| 889 1 | 0896 | | OC | MTIER | 111 # ERROR | | 80701700 |
| | | * | | | | | 80701710 |
| | | * | | MOOI | FIER TRANSFER VECTORS | | 80701720 |
| | | * | | | | | 80701730 |
| 88A 1 | | FNCCL | | MTIER | 000 # ERROR | | 80701740 |
| 88B 1 | | | DC | WTMAB | 001 # WRT TP MRK | | 80701750 |
| 88C 1 | | | DC | ERAB | OlO # ERASE | | 80701760 |
| 880 1 | | | OC. | BSP12 | 011 # BSP | | 80701770 |
| 88E 1 | | | DC | RWDIR | 100 # REWINO | | 80701780 |
| 88F 1 | | | DC | MTIER | 101 # ERROR | | 80701790 |
| 890 1 | | | OC. | MTIER | 110 # EPROR | | 80701800 |
| 891 1 | 0896 | | DC | MTIER | 111 # ERROR | | 80701810 |
| | | * | | | | | 80701820 |
| | | * | | HAD | A DOUBLE INTERRUPT | | 80701830 |
| | | * | | | | | 80701840 |
| | 430B | DBINT | | 3 11 | GD TO PRINT VIA MER | SRC | 80701850 |
| | E001 | | DC | /E001 | ID 01 | | 80701860 |
| | 0009 | | OC | /0009 | LINE O FORM 9 | | 80701870 |
| 895 0 | 7003 | | MDX | DBIN1 | GO TO RTN EXIT | | 80701880 |
| | | * | | <u> </u> | | • | 80701890 |
| | | * | | FUNC | CTION OR MODIFIER WRON | G | 80701900 |
| | | * | | | | | 80701910 |
| | 430B | MTIER | | 3 11 | GD TO PRINT VIA MER | SRC | 80701920 |
| | E002 | | DC | /E002 | ID 02 | | 80701930 |
| | 0009 | | OC. | /0009 | LINE O FORM 9 | | 80701940 |
| 899 0 | 434C | OBIN1 | R2 I | 3 76 | GO TO RTN EXIT | | 80701950 |
| | | * | | - | **** | | 80701960 |
| | | * | | SPEC | CIAL RTN RUNNING | | 80701970 |
| | | * | | | 057 574 | | 80701980 |
| | | SPINT | | 2 28 | GET RTN NUMBER | | 80701990 |
| | C21C | | A | TAG02 | ADD TABLE ADDRESS L | | 80702000 |
| 89B 0 | 8004 | | CTD | SPIAB+1 | PLACE IN BRANCH INS | TR. | 80702010 |
| 89B 0 | 8004 | | STD | | | | |
| | 8004 | * | 210 | | | | 80702020 |
| 89B 0 | 8004 | * | 210 | | | | 80702030 |
| 89B 0 | 8004 D002 | | BSI | 1 46 | SET IX 3 | SRC | |

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| | 089E 0 | 4C 80 | 0000 | SPI AB | BSC | I | | GC NBLE |) TD R | ETURN | | | 80702060 80702070 80702080 |
|--------|------------------|--------------|---------------------------|---------------|------------|-----|--------------|------------|----------|---------------|----------|------|----------------------------------|
| un. | 08A0 1 08A1 1 | | | * TAG02 SPITB | | | *-7 F07IR | | ABLE A | DDRESS | LESS 7 | | 80702090 80702100 80702110 |
| | 08A2 1 | | | 3, 1, 0 | DC | | F08IR | | 3011.10 | 8 | | | 80702120 |
| | 08A3 1 | | | | OC | | F08IR | | | 9 | | | 80702130 |
| | 08A4 1 | | | | DC | | MTIER | | | 10 | | | 80702140 |
| | 08A5 1 | | | | DC | | FO8IR | | | 11 | | | 80702150 |
| | 08A6 1 | | | | DC | | FOEIR | | | 12 | | | 80702150 |
| | 08A7 1 | | | | DC | | FOFIR | | | 13 | | | |
| | 08A8 1 | | | | DC | | | | | | | | 80702170 |
| | | | | | | | Floir | | | 14 | | | 80702180 |
| | 08A9 1 | | | | DC | | MTIER | | | 15 | | | 80702190 |
| | 08AA 1 | | | | DC | | F12IR | | | 16 | | | 80702200 |
| | 08AB 1 | UF 13 | | | 00 | | Floir | | | 17 | | | 80702210 |
| | | | | | *** | *** | *** *** | **** | *** ** | * *** * | *** *** | | 80702220 |
| | | | | * | | | | | | | | | 80702230 |
| | | | | * | | | 11 | II TI AL I | IZATIO | N ROUT | INE | | 80702240 |
| | | | | * | | | | | | | | | 80702250 |
| | | | | | | *** | *** *** | * *** * | *** ** | * *** * | | | 80702260 |
| | OSAC O | 0000 | | MTRST | DC | | 0 | | | | | SE | 80702270 |
| | OBAD O | 1010 | | | SL A | | 16 | Cı | LEAR D | ST TABL | .ES | | 80702280 |
| | OBAE O | 633A | | | LDX | 3 | 58 | | | | | | 80702290 |
| | 08AF 1 | 0700 | 0938 | MONOO | STO | L3 | DSTO-1 | | | | | | 80702300 |
| | 08B1 0 | 73FF | | | MDX | 3 | - 1 | | | | | | 80702310 |
| | 08B2 0 | 70FC | | | MDX | | MONOO | | | | | | 80702320 |
| | | | | * | | | | | | | | | 80702330 |
| | | | | * | | | SE | ET NECE | ES SAR Y | DST V | ALUES | | 80702340 |
| | | | | * | | | | | | | | | 80702350 |
| | 0883 1 | 6780 | 0816 | | LDX | 13 | EDITI | 1) | X3 # N | D TRACE | CS/DR 0 | | 80702360 |
| | 0885 1 | | | | STX | | DSTO | | | TRACKS | | | 80702370 |
| | 08B7 1 | | | | LD | | MONXC | ٠, | | ECTED 1 | | | 80702380 |
| | 0889 0 | | 0007 | | STO | | DROTB&2 | 0 (1 | ET FOR | | חות שלות | | 80702390 |
| | 08BA 1 | | 0817 | | LDX | 13 | EDIT2 | _ | | O TRACE | (\$/np 1 | | 80702400 |
| | 08BC 1 | | | | STX | | DST1 | | | TRACKS | | | • |
| | 08BE 1 | | | | LO | | | 31 | | | - | | 80702410 |
| | | | UOCA | | | L3 | MONXC | | | ECTED | IM DAIA | | 80702420 |
| | 0800 0 | | | | STO | | DR1TB&2 | - | ET FOR | | | | 80702430 |
| | 08C1 0 | | | | SLA | | 16 | | ERO AC | | | | 80702440 |
| | 08C2 0 | | | | STO | | SELSW | | LEAR S | | | | 80702450 |
| | 08C3 0 | - | | | STO | | ACMT | | LEAR [| | | | 80702460 |
| | 08C4 1 | | | | LDX | | MON03 | SI | ET RET | URN | | | 80702470 |
| | 08C6 1 | | | | STX | Ll | MLSCF | | | | | | 80702480 |
| | 08C8 1 | 4C80 | O8AC | | BSC | I | MTRST | E) | XIT | | | SX | 80702490 |
| | 08CA 0 | 1300 | | MONXC | DC | | /1300 | 9 | TRACK | C TM | | | 807025 00 |
| | 08CB 0 | 3C00 | | | OC | | /3C00 | 7 | TRACK | C TM | | | 80702510 |
| | 0800 0 | 0000 | | ACMT | OC | | 0 | A | REA CO | DE | | | 80702520 |
| • | | | | * *** | *** | *** | *** ** | * *** : | *** ** | * *** | *** *** | k | 80702530 |
| | | | | * | | | | | | | | | 80702540 |
| | | | | * | | | EI | ND PRO | GRAM R | OUTINE | | | 80702550 |
| | | | | * | | | | | | | | | 80702560 |
| | | | | * *** | *** | *** | *** ** | * *** | *** ** | * *** : | *** **** | ķ | 80702570 |
| | 08CD 0 | 0000 | | MTENO | OC. | | 0 | | | | | SE | 80702580 |
| | 08CE 1 | | 0010 | | | 1 | SET X4 | \$1 | ET IXI | NG | | SRC | 80702590 |
| | 0001 | | | * | | _ | oc. A. | ٠, | L | 0 | | 31.0 | 80702600 |
| | | | | * | | | | | | | | | 80702610 |
| | 08D0 0 | 4251 | | · | BSI | 3 | 81 | C | 0 0 51 5 | ASE OE | VICE | SRC | 80702620 |
| | 0801 1 | | OPC D | | _ | | MTEND | O. | U KLL | LASE VE | AICE | | |
| | 0801 1 | 4C 80 | OBCD | * *** | | | | | | . معاملة مانا | *** *** | SX | 80702630 |
| | | | | | *** | *** | *** *** | * *** | *** ** | ** *** | *** *** | • | 80702640 |
| | | | | * | | | | | | | | | 80702650 |
| | | | | * | | | C. | ALL UN | MONII | OR FOR | EDIT | | 807026 6 0 |
| | | | | * | | | | | | | | | 80702670 |
| | | | | | | | | | | | *** **** | | 80702680 |
| | | | | | | | | **** | ***** | ***** | ****** | k | 80702690 |
| | 08D3 0 | | 012C | MTBEG | _ | I | BEGIN | | | | | k | 80702700 |
| | 08D5 1 | 07FF | | | 0 C | | P 10 | | | | | ŧ | 80702710 |
| | | | | | | | | | | | ****** | | 80702720 |
| | | | | * *** | *** | *** | *** ** | * *** | *** ** | ** *** | *** *** | * | 80702730 |
| | | | | | | | | | | | | | |
| DATE | 28FEB | | 01 J UL 6 6 | 15MA | | | N0V69 | 30JAN | 70 | | | | PROG ID |
| EC ND. | 41512 | U | 415178 | 4117 | 5 L | 43 | 1319 | 43131 | 94 | | | | PAGE |
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ISM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM

2400 FUNCTION TEST

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2400 FUNCTION TEST

| | * | | | 80702740 | 0911 0 0000 DC 0 8SP RTN RETURN 8 80703420 |
|------------------|---------------|-----------|--------------------------|------------------|---|
| | * | DR 1 | IVE O TABLE OF CONSTANTS | 80702750 | 0912 0 0428 DC /0428 BSP FNC & MOD 9 80703430 |
| | * | | RETURNS | 80702760 | 0913 0 0000 DC 0 RWD RTN RETURN 10 80703440 |
| | * | | | 80702770 | 0914 0 0424 DC /0424 RWD FNC & MOD 11 80703450 |
| | * *** *** *** | *** *** | *** *** *** *** *** | 80702780 | 0915 0 0000 DC |
| 08D6 D FF00 | DROT8 DC | /FF00 | DRO LDDP RTN SAVE O | 80702790 | 0916 0 0720 DC /0720 SENSE FNC & MOD 13 80703470 |
| 08D7 0 0D00 | DC | 0 | WRT RTN RETURN 1 | 80702800 | 0917 0 0000 DC |
| 0808 0 0000 | DC | 0 | ERA RTN RETURN 2 | 80702810 | 0918 0 0000 DC 0 SET MLSCF STORAGE 15 80703490 |
| D8D9 0 0402 | DC | /0402 | ERA MOD & FNC 3 | 80702820 | 0919 1 08D2 DC SET X1 SET MLSCF ENTRY 16 80703500 |
| 08DA D 0000 | DC | 0 | WR TM RTN RETURN 4 | 80702830 | 091A 0 0000 DC 0 SET INT RETURN 17 80703510 |
| 08D8 0 0401 | DC | /0401 | WR TM FNC & MDD 5 | 80702840 | 0918 1 08E5 DC SETI1 SET INT ENTRY 18 80703520 |
| 0800 0 0000 | DC | 0 | READ RTN RETURN 6 | 80702850 | 091C 0 0000 DC 0 CK8SY RETURN 19 80703530 |
| 08DD 0 0000 | DC | 0 | READ RETRY SW 7 | 80702860 | 091D 0 0000 DC 0 CK AVL RETURN 20 80703540 |
| 08DE 0 0000 | DC | Ö | 8SP RTN RETURN 8 | 80702870 | 091E 0 0000 DC 0 LDG/ERRDR SW 21 80703550 |
| 08DF 0 0408 | DC | /0408 | 8SP FNC & MDD 9 | 80702880 | 091F 1 0D5C DC MERX1 DR1 MSG ADRS 22 80703560 |
| 08EO O 0000 | DC | 0 | RWD RTN RETURN 10 | 80702890 | 0920 0 0000 DC 0 MER/MLG RETURN 23 80703570 |
| 08E1 0 0404 | DC | /0404 | RWD FNC & MDD 11 | 80702900 | 0921 0 0000 DC 0 RTN 3/4 SW 24 80703580 |
| 08E2 0 0000 | DC | 0 | SENSE RTN RETURN 12 | 80702910 | 0922 0 0000 DC 0 RTN 5/6 SW 25 80703590 |
| 08E3 0 0700 | DC | /0700 | SENSE FNC & MDD 13 | 80702920 | 0923 0 0000 DC 0 SET UP 1 RETURN 26 80703600 |
| 08E4 0 0000 | DC | 0 | STAC RTN RETURN 14 | 80702930 | 0924 0 0700 DC /0700 RTN 9 MDD & FNC 27 80703610 |
| 08E5 0 0000 | DC | 0 | SET MLSCF STDRAGE 15 | 80702940 | 0925 0 0728 DC /0728 PRDG STDP MDD&FNC 28 80703620 |
| 08E6 1 08CF | DC | SET XO | SET MLSCF ENTRY 16 | 80702950 | 0926 0 0000 DC 0 EXPECTED TM DATA 29 80703630 |
| 08E7 0 0000 | DC | 0 | SET INT RETURN 17 | 80702960 | 0927 0 0530 DC /0530 WRT-556,2,0DD 30 80703640 |
| 08E8 1 08E2 | DC | SETIO | SET INT ENTRY 18 | 80702970 | 0928 0 0630 DC /0630 RD-556,2,DDD 31 80703650 |
| 08E9 0 0000 | DC | 0 | CK8SY RETURN 19 | 80702980 | 0929 0 062D DC /062D RD-200, 3, EVEN 32 80703660 |
| 08EA 0 0000 | DC | 0 | CKAVL RETURN 20 | 80702990 | 092A 0 052D DC /052D WRT-200, 3, EVEN 33 80703670 |
| 08E8 0 0000 | DC | 0 | LDG/ERRDR SW 21 | 80703000 | 092B 0 0626 DC |
| 08EC 1 0D52 | DC | MERXO | DR O MSG ADRS 22 | 80703010 | 092C 0 0526 DC /0526 WRT MDD & FNC 35 80703690 |
| 08ED 0 0000 | DC | 0 | MER/MLG RETURN 23 | 80703020 | 092D 0 0001 DC 1 CDNSTANT DNE 36 80703700 |
| 08EE 0 0000 | DC | 0 | RTN 3/4 SW 24 | 80703030 | 092E 0 0020 DC /0020 DRIVE SELECTION 37 80703710 |
| 08EF 0 0000 | DC | 0 | RTN 5/6 SW 25 | 80703040 | 092F 0 0000 DC 0 RECDRD CT SAVE 38 80703720 |
| 08F0 0 0000 | DC | 0 | SET UP 1 RETURN 26 | 80703050 | 0930 0 0626 DC /0626 RD MDD ε FNC 39 80703730 |
| 08F1 0 0720 | DC | /0720 | RTN 9 MDD & FNC 27 | 80703060 | 0931 0 0526 DC / 0526 WRT MDD & FNC 40 80703740 |
| 08F2 0 0708 | DC | /0708 | PROG STDP MDD&FNC 28 | 80703070 | 0932 0 0000 DC 0 RTN 14/17 SW 41 80703750 |
| 08F3 0 0000 | DC | 0 | EXPECTED TM DATA 29 | 80703080 | 0933 0 0000 DC 0 SENSE WD STDRAGE 42 80703760 |
| 08F4 0 0510 | DC | /0510 | WRT-556,2,DDD 30 | 80703090 | 0934 0 0000 DC 0 REQ DEV RETURN 43 80703770 |
| 08F5 0 0610 | DC | /0610 | RD-556,2,DDD 31 | 80703100 | 0935 0 0000 DC 0 REL DEV RETURN 44 80703780 |
| 08F6 0 060D | DC | /060D | RD-200,3, EVEN 32 | 03110 | 0936 1 OC1A DC LIV1 LOST INT VEC DR 1 45 80703790 |
| 08F7 0 050D | DC | /050D | WT-200,3, EVEN 33 | 03120 | 0937 0 0000 DC 0 46SE 80703800 |
| 08F8 0 0606 | DC | /0606 | READ FNC & MDD 34 | 80703130 | 0938 0 70CC MDX SETX6 47 80703810 |
| 08F9 0 0506 | DC | /0506 | WRT FNC & MDD 35 | 80703140 | * *** *** *** *** *** *** *** *** *** *** 80703820 |
| 08FA 0 0001 | DC | 1 | CONSTANT DNE 36 | 80703150 | * 80703830 |
| 08F8 0 0000 | DC | 0 | DRIVE SELECTION 37 | 80703160 | * DEVICE STATUS TABLES 80703840 |
| 08FC 0 0000 | DC | 0 | RECDRD CT SAVE 38 | 80703170 | * DRIVE 0 80703850 |
| 08FD 0 0606 | DC | /0606 | READ FNC & MDD 39 | 80703180 | * 80703860 |
| 08FE 0 0506 | DC | /0506 | WRT FNC & MDD 40 | 80703190 | * *** *** *** *** *** *** *** *** *** |
| 08FF 0 0000 | DC | 0 | RTN 14/17 SW 41 | 80703200 | 0939 0 0000 DSTO DC 0 NUMBER TRACKS 0 80703880 |
| 0900 0 0000 | DC | 0 | SENSE WD STORAGE 42 | 80703210 | 093A 0 0000 DC 0 AREA CDDE 1 80703890 |
| 0901 0 0000 | DC | 0 | REQ DEV RETURN 43 | 8070322 0 | 0938 0 0000 DC 0 FUNCTIDN 2 80703900 093C 0 0000 DC 0 MDDIFIER 3 80703910 |
| 0902 0 0000 | DC | 0 | REL DEV RETURN 44 | 80703230 | 093C 0 0000 DC 0 MDDIFIER 3 80703910 093D 0 0000 DC 0 READ TM 4 80703920 |
| 0903 1 0C18 | DC | LIVO | LDST INT VEC DR 0 45 | 80703240 | 093E 0 0000 DC 0 WD CT RECEIVED 5 80703930 |
| 0904 0 0000 | DC | 0 | 46SE | 80703250 | 093F 0 0000 DC 0 EXPECTED WD CT 6 80703940 |
| 0905 1 6700 0974 | SETX6 LDX L | 3 MTTWD | IX3#ADRS CMN 47 48 | 80703260 | 0940 0 0000 DC 0 WRITE TM 7 80703950 |
| 0907 0 4D80 002E | 85C I | | EXIT 49 50 SX | 80703270 | |
| | * *** *** ** | * *** *** | *** *** *** *** *** | 80703280 | |
| | * | | | 80703290 | 0942 0 0000 DC 0 PASS CT 9 80703970 0943 0 0000 DC 0 RECDRD CT 10 80703980 |
| | * | | IVE 1 TABLE DF CDNSTANTS | 80703300 | 0944 0 0000 DC 0 WD CT FDR CK 11 80703990 |
| | * | AN | D RETURNS | 80703310 | |
| | * | | | 80703320 | 0945 0 0000 DC 0 TDTAL WRITES 12 80704000 0946 0 0000 DC 0 TDTAL READS 13 80704010 |
| | | | *** *** *** *** *** | 80703330 | 0947 0 0000 DC 0 TDTAL REWINDS 14 80704020 |
| 0909 D 00FF | DR 1 TB DC | /00FF | DR 1 LDDP RTN SAVE | 80703340 | 0948 0 0000 DC 0 WD CT DESIRED 15 80704020 |
| 090A 0 0000 | DC | 0 | WRITE RTN RETURN 1 | 80703350 | 0949 0 0000 DC 0 RECDV RD CT 16 80704040 |
| 090B 0 0000 | DC | 0 | ERA RTN RETURN 2 | 80703360 | 0949 0 0000 DC 0 RECDV ND C1 16 80704040 0948 0 0000 DC 0 RECDV NT CT 17 80704050 |
| 0900 0 0422 | DC | /0422 | ERA MDD & FNC 3 | 80703370 | 0948 0 0000 DC 0 UNRECDY RD CT 18 80704060 |
| 090D 0 0000 | DC | 0 | WR TM RTN RETURN 4 | 80703380 | 094C 0 0000 DC 0 UNRECDY NO CT 18 80704070 |
| 090E 0 0421 | DC | /0421 | WR TM FNC & MDD 5 | 80703390 | 094D 0 0000 DC 0 TAPE ERASE CT 20 80704080 |
| 090F 0 0000 | DC | 0 | RD RTN RETURN 6 | 80703400 | 094E 0 0000 DC 0 ERRDR CDNTROL 21 80704090 |
| 0910 0 0000 | DC | 0 | RD RETRY SW 7 | 80703410 | 0712 0 0000 00 ENROL 21 00104070 |
| | | | | | |

15MAY67

411731

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2400 FUNCTION TEST

| 094F 0 0000 | DC 0 | WDRD PATTERN 22 | 80704100 | = | 098E 0 0000 | WTM DC | 0 | 26 | SE 80704780 |
|------------------------------|-------------------|----------------------|-------------------|---|------------------|-----------|-------------|-------------------------|-------------------|
| 0950 0 0000 | DC o | ACTUAL WORD 23 | 80704110 | | 098F 1 4C00 OABE | BSC | L WTME | GO TO WT TM RT 27 28 | 80704790 |
| 0951 0 0000 | DC 0 | PRDG CT 24 | 80704120 | | 0991 0 0000 | ERA DC | 0 | 29 | |
| 0952 0 0000 | DC 0 | SPECIAL DSW 25 | 80704130 | | 0992 1 4C00 0AB3 | BSC | L ERAE | GO TO ERASE RT 30 31 | 80704810 |
| 0953 0 0000 | DC 0 | | | _ | | - | L CAAL | | |
| | | DRIVE BUSY SW 26 | 80704140 | | 0994 0 0000 | DSW DC | 0 | 32 | |
| 0954 0 0000 | DC 0 | DRIVE AVAIL SW 27 | 80704150 | | 0995 1 4C00 OBA7 | B SC | L DSWEN | GD SENSE DRIVE 33 34 | 80704830 |
| 0955 0 0000 | RTN DC 0 | RTN NUMBER 28 | 80704160 | _ | 0997 0 0000 | STPST DC | 0 | 35 | SE 80704840 |
| | * *** *** *** *** | *** *** *** *** *** | 80704170 | | 0998 1 4C00 OBBD | BSC | L STPSE | GO SET MLSCF 36 37 | 8070 48 50 |
| | * | | 80704180 | | 099A 0 0000 | CKBSY DC | 0 | 38 | SE 80704860 |
| | * DEV | ICE STATUS TABLE | 80704190 | | 099B 1 4C00 0BE7 | BSC | L CKBSE | GO CK BUSY 39 40 | 80704870 |
| | | VE 1 | 80704200 | | 099D 0 0000 | CKAVL DC | 0,000 | 41 | |
| | - DK1 | VL 1 | | | | | CVANE | | |
| | | | 80704210 | | 099E 1 4C00 0C2C | BSC | L CKAVE | GD CK AVAIL 42 43 | 80704890 |
| | | *** *** *** *** *** | 80704220 | | 09A0 0 0000 | MRCD DC | 0 | 44 | |
| 09 56 0 0 00 0 | DST1 DC 0 | NUMBER TRACKS 0 | 80704230 | | 09A1 1 4C00 0C43 | BSC | L MRCDE | GD CK DATA 45 46 | 80 704910 |
| 0957 0 0000 | DC O | AREA CODE 1 | 80704240 | | 09A3 0 0000 | MRSC DC | 0 | 47 | SE 80704920 |
| 0958 0 0000 | DC 0 | FUNCTION 2 | 80704250 | | 09A4 1 4C00 0D6F | BSC | L MRSCE | GD SET I/D ARA 48 49 | 80704930 |
| 0959 0 0000 | DC o | MODIFIER 3 | 80704260 | | 09A6 0 0000 | COMOO DC | 0 | 50 | |
| 095A 0 0000 | DC o | READ TM 4 | 80704270 | | 09A7 1 4C00 0E8F | BSC | L COMOE | GO SET UP RTN1 51 52 | 80704950 |
| 095B 0 0000 | DC 0 | WD CT RECEIVED 5 | 80704280 | | | | L COMUE | | |
| | | | | | 0949 0 0000 | COMO1 DC | | 53 | |
| 095C 0 0000 | DC 0 | WD CT EXPECTED 6 | 80704290 | | 09AA 1 4C00 0E97 | | L CDM1E | GO SET UP RTN2 54 55 | 80704970 |
| 095D 0 0000 | DC 0 | WRITE TM 7 | 80704300 | | 09AC 0 0000 | STARE DC | 0 | 56 | |
| 095E 0 0000 | DC 0 | LAST DSW 8 | 80704310 | | 09AD 0 4C80 012D | BSC | | GO TO DIAG MON 57 58 | 80704990 |
| 095F 0 0000 | DC 0 | PASS CT 9 | 80704320 | | 09AF 0 4323 | EXITE BSI | 3 35 | GO SET MLSCF ENTRY | |
| 0960 0 0000 | DC 0 | RECORD CT 10 | 80704330 | | 09B0 1 0A5B | DC | MRTN | | 80705010 |
| 0961 0 0000 | DC 0 | WD CT FDR CK 11 | 80704340 | | 09B1 1 4C00 0D68 | BSC | L MERL1 | GD TO CLEAR | 80705020 |
| 0962 0 0000 | DC 0 | TOTAL WRITES 12 | 80704350 | | 0983 0 0007 | DC | 7 | | |
| | | | | | = | | | | 80705030 |
| 0963 0 0000 | DC 0 | TOTAL READS 13 | 80704360 | | 09B4 0 000A | DC | 10 | CDNSTANT 10 64 | 80705040 |
| 0964 0 0000 | DC 0 | TDTAL REWINDS 14 | 80704370 | | 0985 0 0009 | DC | 9 | CDNSTANT 9 65 | 80705050 |
| 0965 0 0000 | DC 0 | WD CT DESIRED 15 | 80704380 | | 09B6 0 0008 | RDTY4 DC | 8 | CONSTANT 8 66 | 80705060 |
| 0966 0 0000 | DC 0 | RECOV RD CT 16 | 80704390 | | 09B7 1 09D1 | DC | IOA | ADRS OF I/O AREA 67 | 80705070 |
| 0967 0 0000 | DC 0 | RECOV WT CT 17 | 80704400 | | 09B8 0 0014 | DC | 20 | CONSTANT 20 68 | 80705080 |
| 0968 0 0000 | DC 0 | UNRECOV RD CT 18 | 80704410 | | 09B9 0 4014 | DC | /4014 | WC # 20, ND EOT 69 | 80705090 |
| 0969 0 0000 | DC 0 | UNRECOV WT CT 19 | 80704420 | | 09BA 0 0004 | DC | 4 | CDNSTANT 4 70 | 80705100 |
| 096A 0 0000 | DC 0 | | 80704430 | | | | 7,000 | | |
| | | | | | 09BB 0 4000 | DC | /4000 | NO END TBL INT 71 | 80705110 |
| 096B 0 0000 | DC 0 | ERROR CONTROL 21 | 80704440 | | 09BC 0 0005 | RDTY6 DC | 5 | CONSTANT 5 72 | 80705120 |
| 096C 0 0000 | DC 0 | WORD PATTERN 22 | 80704450 | | 09BD 0 0000 | COMO3 DC | 0 | 73 | SE 80705130 |
| 096D 0 0000 | DC 0 | ACTUAL WORD 23 | 8 070446 0 | | 09BE 1 4C00 0B98 | BSC | L COM3E | GO TD SET UP 3 74 75 | 80705140 |
| 096E 0 0000 | DC 0 | PROG CT 24 | 80704470 | | 0900 0 0000 | EXIT DC | 0 | 76 | SE 80705150 |
| 096F 0 0000 | DC 0 | SPECIAL DSW 25 | 80704480 | | 09C1 1 4C00 09AF | BSC | L EXITE | 77 78 | 80705160 |
| 0970 0 0000 | DC 0 | DRIVE BUSY SW 26 | 80704490 | | 0903 0 0100 | SPENC DC | /0100 | CONSTANT 0100 79 | 80705170 |
| 0971 0 0000 | DC 0 | DRIVE AVAIL SW 27 | 80704500 | | 0904 0 0200 | DC | /0200 | | |
| 0972 0 0000 | RTN1 OC O | | | | | | | | 80705180 |
| 0972 0 0000 | | | 80704510 | | 0905 0 0000 | MTRLD DC | 0 | | SE 80705190 |
| | * *** *** *** *** | *** *** *** *** *** | 80704520 | | 09C6 1 4C00 0DA4 | BSC | L MTRLE | GO RELEASE 82 83 | 80705200 |
| | * | | 80704530 | | 0908 0 0000 | MTRED DC | 0 | 84 | SE 80705210 |
| | * TAB | BLE DF COMMON VALUES | 80704540 | | 09C9 1 4C00 0D8D | BSC | L MTREE | GO REQUEST 85 86 | 80705220 |
| | * | | 80704550 | | 09CB 0 0000 | STIR DC | 0 | 87 | SE 80705230 |
| | * *** *** *** *** | *** *** *** *** *** | 80704560 | | 09CC 1 4C00 0BD4 | BSC | L STIRE | GO TO SET INT 88 89 | 80705240 |
| 0974 0000 | BSS E O | | 80704570 | | 09CE 0 0000 | STAC DC | 0 | 90 | |
| 0974 0 0002 | MTTWO DC 2 | CDNSTANT 2 0 | 80704580 | | 09CF 1 4C00 007E | | L STACE | GO SET DR SEL 91 92 | |
| | | | | | 0901 1 4000 0016 | | _ | *** *** *** *** *** | 80705260 |
| 0975 0 0003 | | CONSTANT 3 1 | 80704590 | | | ተ ተቀተ ተቀቀ | *** *** *** | *** *** *** *** | 80705270 |
| 0976 1 09DB | IOCCI DC IOA&10 | RTN 7 IOCC 2 | 80704600 | | | * | | | 80705280 |
| 0977 0 0000 | DC 0 | 3 | 80704610 | | | * | 1/ | O AREA-USED BY BOTH DRS | 80705290 |
| 09 78 1 09 D1 | IOCC2 DC IOA | COMMON IOCC 4 | 80704620 | | | * | | | 80705300 |
| 0979 0 0000 | DC 0 | 5 | 80704630 | | | * *** *** | *** *** *** | *** *** *** *** *** | 80705310 |
| 097A 0 0000 | IOCC3 DC 0 | COMMON IOCC 6 | 80704640 | | 09D1 0 0000 | IOA DC | 0 | I/O AREA 93 | 80705320 |
| 097B 0 0000 | 0C 0 | 7 | 80704650 | | 09D2 0 0000 • | DC | ő | I/D AREA &1 94 | 80705330 |
| 097C 0 0000 | MLG DC 0 | 8 SE | 80704660 | | 09D3 0 0000 | DC | Ô | | |
| | BSC L MLGE | | 80704670 | | 0904 0 0000 | | • | | 80705340 |
| 0970 1 4C00 0CAB | | | | | | DC | 0 | I/O AREA &3 96 | 80705350 |
| 097F 0 0000 | MER DC 0 | 11 SE | 80704680 | | 0905 0 0000 | DC | 0 | I/O AREA 64 97 | 80705360 |
| 0980 1 4C00 0CB1 | BSC L MER1E | GO TO MER RTN 12 13 | 80704690 | | 09D6 0 0000 | DC | 0 | I/D AREA &5 98 | 80705370 |
| 0982 0 0000 | BSP DC 0 | 14 SE | 80704700 | | 0907 0 0000 | DC | 0 | I/O AREA &6 99 | 80705380 |
| 0983 1 4C00 0B6C | BSC L BSPE | GO TO BSP RTN 15 16 | 80704710 | | 09D8 0 0000 | DC | 0 | I/O AREA 67 100 | 80705390 |
| 0985 0 0000 | RWD DC 0 | 17 SE | 80704720 | | 09D9 0 0000 | DC | ŏ | I/C AREA 68 101 | 80705400 |
| 0986 1 4C00 0B79 | BSC L RWDE | GD TO RWD RTN 18 19 | 80704730 | | 09DA 0 0000 | DC | Ô | | |
| | | 20 SE | | | | | - | | 80705410 |
| 0988 0 0000 | | | 80704740 | | 09DB 0 0000 | DC | 0 | I/O AREA &10 103 | 80705420 |
| 0989 1 4C00 OAC8 | BSC L RDTE | GO TO READ RTN 21 22 | 80704750 | | 09DC 0 0000 | DC | 0 | I/O AREA 611 104 | 80705430 |
| 098B 0 0000 | WRTM OC O | 23 SE | 80704760 | | 09DD 0 0000 | DC | 0 | I/D AREA &12 105 | 80705440 |
| 098C 1 4C00 0A6B | BSC L WRTME | GO TO WRT RTN 24 25 | 80704770 | | 09DE 0 0000 | DC | 0 | I/D AREA &13 106 | 80705450 |
| | | | | | | | | | |
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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2400 FUNCTION TEST

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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2400 FUNCTION TEST

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| 09DF 0 0000 | 0C 0 | I/O AREA &14 107 | 80705460 | OA1E 0 0000 | OC | /0000 | LINE O - FORM O | B070614 | 0 |
|-----------------------------|-------------------------|---------------------------|------------|----------------------------|-----------|------------|------------------------|--------------|----|
| 09E0 0 0000 | oc o | I/O AREA &15 108 | 80705470 | | ******* | **** | *********** | 8070615 | o |
| 09E1 0 0000 | oc o | 1/0 AREA &16 109 | 80705480 | OA1F 0 4C80 012E | MONAA BSC | I END | GO END PROGRAM * | 8070616 | |
| 09E2 0 0000 | DC 0 | I/O AREA &17 110 | 80705490 - | | ****** | ***** | ******** *** | 8070617 | 0 |
| 09E3 0 0000 | 0 C 0 | I/O AREA &18 111 | 80705500 | | * | | | 80706186 | 0 |
| 09E4 0 0000 | oc o | I/O AREA &19 112 | 80705510 | | * | DR 1 | SELECTED BUT NOT ROY | 80706190 | 0 |
| 09E5 0 0000 | oc 0 | I/O AREA &20 113 | 80705520 | | * | | | 8070620 | /O |
| 09E6 0 0000 | INTIG OC O | 114 SE | 80705530 | 0A21 0 430B | MONO2 BSI | 3 8 | GO TO PRINT VIA MLG | SRC 80706216 | 0 |
| 09E7 1 4C00 ODB1 | BSC L INTIE | SET INT IGNRE115 116 | 80705540 | 0A22 0 C001 | OC | /C001 | 10 1 | 8070622 | 0 |
| 09E9 0 0000 | 0C 0 | 117 SE | 80705550 | 0A23 0 0000 | oc | /0000 | LINE O - FORM O | 80706230 | |
| _ | | | | 0A24 0 70FA | MOX | MONAA | | 8070624 | |
| 09EA 0 4326 | BSI 3 38 | CK FOR BSY 118 | 80705560 | 012 1 0 1011 | * | | | 8070625 | |
| 09EB 0 4338 | 8SI 3 56 | TO DIAG MON 119 | 80705570 | | * | CHECK | K SWITCH SETTINGS | 80706260 | |
| | | *** *** *** *** *** | 80705580 | | * | 0,,,,, | \ J#17011 JE1111103 | 8070627 | |
| | * *** *** *** *** *** * | *** *** *** *** *** | 80705590 | | * | | | 80706280 | |
| | * | | 80705600 | 0A25 1 C400 0802 | MGN12 LO | L SWO | GET SW FNC O | 8070629 | |
| | | CK FOR SELECTED ORIVES | 80705610 | 0A27 1 4C04 0A1F | BSC | L MONAA,E | BRANCH # TERMINATE | 8070630 | |
| | * BEI | NG READY | 80705620 | | MDX | | BRANCH # TERMINATE | 8070631 | |
| | * | | 80705630 | 0A29 0 7013 | T HUX | MON10 | | 80706320 | |
| | | *** *** *** *** *** | 80705640 | | | CCT 1 | TO NEVT OTH | | |
| 09EC 1 4400 OC1C | MONO3 BSI L SETX4 | SET IXING TO OR O SRC | 80705650 | | + | 2E i | TO NEXT RTN | 8070633 | |
| 09EE 0 4354 | BSI 3 B4 | GO REQ DEVICE SRC | 80705660 | | * | | | 8070634 | |
| 09EF 1 C400 0B19 | LD L MTIO | GET AREA CODE | 80705670 | 0A2A 0 C21C | MON17 LO | 2 28 | GET RTN NUMBER | 80706350 | |
| 09F1 0 D201 | STO 2 1 | SET IN DST | 80705680 | 0A2B 0 B124 | MON16 A | 1 36 | ADD ONE | 8070636 | |
| 09F2 1 C400 0804 | LO L SW2 | GET SW FNC 2 | 80705690 | OA2C 0 021C | STO | 2 28 | SAVE | 8070637 | |
| 09F4 0 4828 | BSC &Z | IS DR O SELECTEO | 80705700 | | * | | | 8070638 | |
| | * | TO BE RUN | 80705710 | | * | BRANC | CH TO SELECTED RTN | 8070639 | |
| 09F5 0 7007 | MDX MONO4 | NO-CK OR 1 | 80705720 | | * | | | 80706400 | |
| 09F6 1 7401 087E | MDX L SELSW,1 | AOD 1 TO SEL SW | 80705730 | 0A2O 0 4320 | MONO9 BSI | 3 32 | GO SENSE DEVICE | SRC 8070641 | .0 |
| 09FB 0 4320 | BSI 3 32 | GO SENSE DEVICE SRC | 80705740 | 0A2E 0 180 2 | SRA | 2 | | 8070642 | .0 |
| 09F9 0 4804 | BSC E | IS DRIVE READY | 80705750 | 0A2F 0 4804 | BSC | Ε | IS DR AT EOT | 8070643 | 0 |
| 09FA 0 7021 | MDX MONO1 | NO-GO PRINT | 80705760 | 0A30 0 4311 | BSI | 3 17 | YES-GO REWIND | SRC 80706440 | 0 |
| 09FB 0 4323 | BSI 3 35 | GO SET MLSCF ENTRY SRC | 80705770 | 0A31 0 4329 | BSI | 3 41 | GO CK DR FOR AVAIL | SRC 8070645 | 0 |
| 09FC 1 0A25 | DC MON12 | 00 327 712307 247777 3770 | 80705780 | 0A32 0 6314 | LDX | 3 20 | | 80706466 | 0 |
| UNIC I UNES | * | | 80705790 | 0A33 0 2F40 | MON20 DC | /2F40 | CLEAR STORAGE PRICT | B070647 | 0 |
| | * Cuc/ | CK DRIVE ONE | 80705800 | 0A34 1 0901 | OC | IOA | | 80706486 | |
| | + CHEC | CK DRIVE DIVE | 80705810 | 0A35 0 73FF | MDX | 3 -1 | DECR IX 3 | 8070649 | |
| 0050 1 4400 0534 | MONO/ Del 4 CETYE | CET TANKE TO BE 1 COC | | 0A36 0 70FC | MDX | MON20 | LOOP | 8070650 | |
| 09FD 1 4400 0C24 | MONO4 BSI L SETX5 | SET IXING TO DR 1 SRC | 80705820 | 0A37 0 C21C | LO | 2 28 | GET RTN NUMBER | 8070651 | |
| 09FF 1 C400 0819 | LD L MTIO | GET AREA CODE | 80705830 | 0A38 0 800E | A | TAG01 | ADO TABLE ADORESS | 8070652 | |
| 0A01 0 D201 | STO 2 1 | SET IN OST | 80705840 | 0A39 0 0002 | STO | MON18+1 | PLACE IN BRANCH ADDRE | | |
| 0A02 0 4351 | BSI 3 81 | GO RELEASE DEVICE SRC | | 0439 0 0002 | * | MONTO | PEACE IN BRANCH ADDRE | 8070654 | |
| 0 A03 0 10 10 | SLA 16 | ZERO ACCUM | 80705860 | | • | | | 80706550 | |
| 0A04 1 0400 08CC | STO L ACMT | CLEAR DR SEL | 80705870 | 0A3A 0 412E | BSI | 1 46 | SET IX 3 | | |
| 0A06 0 C200 | LD 20 | GET NO TRACKS | 80705880 | | | | | | |
| 0A07 1 4C28 0A15 | BSC L MONO5,&Z | | 80705890 | 0A3B 0 4C80 0000 | MON18 8SC | 1 +-+ | GO TO RTN | 8070657 | |
| 0A09 1 C400 0804 | LD L SW2 | GET SW FNC 2 | 80705900 | | Ţ. | 1000 | DOUTTING SIL IS ON | 80706586 | |
| OAOB 0 1001 | SLA 1 | | 80705910 | | Ţ. | LUUP | ROUTINE SW IS ON | 80706590 | |
| 0A0C 0 4828 | BSC &Z | IS OR 1 SELECTEO | 80705920 | 0430 1 5/00 0003 | 40N10 10 | | CET SU ENG OF | 80706600 | |
| | * | TO BE RUN | 80705930 | 0A30 1 C400 0803 | MON10 LO | L SW1 | GET SW FNC 01 | 8070661 | |
| 0A00 0 7007 | MDX MON05 | NO-EXIT | 80705940 | 0A3F 0 E100 | ANO | 1 0 | SAVE SELECTION | 8070662 | |
| 0A0E 1 7401 087E | MDX L SELSW,1 | ADO 1 TO SEL SW | 80705950 | 0A40 1 4C18 0A2A | | L MON17,8- | BRANCH IF ZERO | 8070663 | |
| 0A10 0 4320 | BSI 3 32 | GO SENSE DEVICE SRC | 80705960 | 0A42 0 D21C | MON19 STO | 2 28 | SET AS RTN NO | 8070664 | |
| 0A11 0 4804 | BSC E | IS ORIVE READY | 80705970 | 0A43 0 1808 | SRA | 8 | MOVE OR O SELECTION | 8070665 | |
| 0A12 0 700E | MDX MONO2 | NO-GO PRINT | 80705980 | 0A44 1 4C18 0A2D | | L MON09,&- | RETURN IF ZERO | 8070666 | |
| 0A13 0 4323 | BSI 3 35 | GO SET MLSCF ENTRY SRC | 80705990 | 0A46 0 70FB | MOX | MON19 | LOOP ON NOT O | 8070667 | |
| 0A14 1 0A25 | DC MON12 | | 80706000 | | * | | | 8070668 | |
| 0A15 1 7400 087E | MONOS MDX L SELSW,0 | IS A DRIVE SELECTED | 80706010 | _ | * | | E OF ROUTINE AODRESSES | 8070669 | |
| | ******** | ******** | 80706020 | 0A47 1 0A48 | TAGO1 DC | * | TABLE ADDRESS | 8070670 | - |
| 0A17 0 4338 | MONAC BSI 3 56 | GO TO OIAG MON-START* | 80706030 | 0A48 0 0012 | MONXB DC | /0012 | TOTAL ROUTINES | 8070671 | .0 |
| | ********** | | 80706040 | 0A49 1 00BB | MONXA DC | F01AA | ROUTINE NUMBER 1 | 8070672 | |
| 0A1B 0 4308 | BSI 3 B | GO TO PRINT VIA MLG SRC | 80706050 | OA4A 1 ODBD | DC | FO2AA | 2 | 8070673 | 0 |
| 0A19 0 C002 | DC /C002 | ID 2 | 80706060 | 0A4B 1 0DD1 | DC | F03AA | 3 | 8070674 | 0 |
| 0A1A 0 0000 | OC /0000 | LINE O - FORM O | 80706070 | 0A4C 1 0003 | OC | FO4AA | . 4 | 8070675 | 0 |
| 0A1B 0 7003 | MOX MONAA | <u></u> | 80706080 | 0A4D 1 0E27 | DC | F05AA | . 5 | 8070676 | ,0 |
| 0 1003 | * | | 80706090 | 0A4E 1 CE29 | DC | FO6AA | 6 | 8070677 | 0 |
| | * DD (| O SELECTED BUT NOT ROY | 80706100 | 0A4F 1 0E50 | OC | FO7AA | 7 | 8070678 | |
| | * | 0 32220120 001 NO1 NO1 | 80706110 | 0A50 1 0EA3 | DC | F 08AA | 8 | 8070679 | |
| 0A1C 0 4308 | MONO1 BSI 3 8 | GO TO PRINT VIA MLG SRC | 80706120 | 0A51 1 0EBF | DC | F09AA | 9 | 8070680 | |
| | OC /C000 | 10 0 | 80706130 | 0A52 1 OECE | DC | FOAAA | 10 | 8070681 | |
| OA10 0 C000 | GC / C000 | 10 0 | 00,00100 | | | | - - | | |
| | | | | | | | | | |
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PRDG ID 0807-1

| 2400 FUNCTION TEST | 7 402 | 2400 FUNCTION TEST |
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| • | | |
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| 0A53 1 0ED8 | DC FOBAA | 11 | 80706820 | 1.00 | 0A8A 0 7002 | MDX | WRTID | YES | 807 | 707500 |
|---|---|---|--|------|---|--|---|---|---|--|
| 0A54 1 0EE1 | DC FOCAA | 12 | 80706830 | | OA8B O 4D8O 0001 | WRTIC BSC | 11 1 | EXIT | SX 807 | 707510 |
| 0A55 1 0F24 | DC FODAA | 13 | 80706840 | | | * | | | | 707520 |
| 0A56 1 0F58 | DC FOEAA | 14 | 80706850 | | | * | HAD | A PREVIDUS ERRDR | | 707530 |
| 0A57 1 0F92 | DC FOFAA | 15 | 80706860 | - | | * | TING . | A THE \$1003 EMBN | | 707540 |
| 0A58 1 0FA9 | DC F10AA | 16 | 80 7068 70 | | 0A8D 0 C211 | WRTID LD | 2 17 | GET REC WRT CT | | 707550 |
| 0A59 1 0F56 | DC F11AA | 17 | 80706880 | | | AKTID ED | 1 36 | ADD ONE | | |
| | | | | | 0A8E 0 8124 | | | | | 707560 |
| 0A5A 1 0A5B | | PRDG CDMPLETE | 80706890 | | 0A8F 0 D211 | STD | 2 17 | SAVE | | 707570 |
| | * *** *** *** * | ** *** *** *** *** *** | 89706900 | | | * | | | | 707580 |
| | * | | 80706910 | | 0A90 0 4308 | BSI | 3 8 | GO TD PRINT VIA MLG | | 707590 |
| | * | ROUTINES RETURN HERE | 80706920 | | 0A91 0 A001 | DC | /A001 | 1D 01 | 807 | 707600 |
| | * | | 80706930 | | 0A92 0 0003 | DC | /0003 | LINE O - FDRM 3 | 807 | 707610 |
| | * *** *** *** *** | ** *** *** *** *** *** | 80706940 | | 0A93 0 70F7 | MDX | WRTIC | | 807 | 707620 |
| 0A5B 0 C21C | MRTN LD 228 | GET RTN NUMBER | 80706950 | | | * | | | | 707630 |
| OASC O FOEB | EOR MONXB | | 80706960 | | | * | WRIT | E TO EOT SW IS DFF | | 707640 |
| 0A5D 1 4C20 0A25 | BSC L MDN12 | | 80706970 | | | * | | - 10 201 011 10 D11 | | 707650 |
| CRSD I ICEO CRES | * | COMPLETE | 80706980 | | | * | | | | 707660 |
| 0A5F 0 C21B | · | GET PROG CT | 80706990 | | | | | | | 707670 |
| | LD 2 24 | | | | | 1 | | | | |
| 0A60 0 B124 | A 1 36 | ADD DNE | 80707000 | | 0407 0 5004 | T | 2.10 | CET SECOND ND | | 707680 |
| 0A61 0 D21B | STD 2 24 | SAVE | 80707010 | | 0A94 0 C20A | WRT01 LD | 2 10 | GET RECORD ND | | 707690 |
| | * | | 80707020 | | 0A95 0 901C | \$ | WRIX7 | SUB 501 | | 707700 |
| 0A62 0 4308 | BSI 3 8 | GO TO PRINT VIA MLG SRO | | | 0A96 1 4C18 0A86 | | L WRT03,&- | BRANCH # AT REC 500 | | 707710 |
| 0A63 0 D001 | DC /D001 | | 80707040 | | 0A98 0 70EA | MDX | WRT02 | NDT REC 500 | | 707720 |
| 0A64 0 0005 | DC /0005 | | 80707050 | | | * | | | 807 | 707730 |
| 0A65 0 4308 | BSI 38 | GD TD PRINT VIA MLG SRO | 80707060 | | | * | | | 807 | 707740 |
| 0A66 0 D001 | DC / D00 1 | ID 01 | 80707070 | | | * | DSW | NOT CORRECT | | 707750 |
| 0A67 0 B00B | DC /8008 | | 80707080 | | | * | = = 3* | | | 707760 |
| 0A6B 0 1010 | SLA 16 | ZERO ACCUM | 80707090 | | 0A99 0 C208 | WRTIE LD | 2 8 | GET SENSE WD | | 707770 |
| 0A69 0 D21C | STD 2 28 | SET RTN NUMBER # 0 | 80707100 | | 0A9A 0 E016 | AND | WRIX6 | CK FOR CORR | | 707780 |
| 0A6A 0 70BA | MDX MON12 | | 80707110 | | 0A9B 0 4820 | BSC | Z | SKIP # CORR | | |
| UNDA U TUBA | | ** *** *** *** *** *** | | | 0A9C 0 700C | | | SKIP # CURK | | 707790 |
| | * *** *** *** *** | ** *** *** *** *** *** *** | 80707120 | | 0A9C 0 700C | MDX | WRTII | | | 707800 |
| | * | | 80707130 | | | * | | | | 0707810 |
| | * | THIS IS THE WRITE ROUTINE | 80707140 | | 0A9D 0 4308 | BSI | 3 8 | GO TO PRINT VIA MLG | SRC 807 | 707820 |
| | * | | 80707150 | | 0A9E 0 A002 | DC | /A002 | ID 02 | 807 | 0707830 |
| | * *** *** *** * | ** *** *** *** *** *** | 80707160 | | 0A9F 0 0002 | DC | /0002 | LINE 0 - FORM 2 | 807 | 707840 |
| 0A6B 0 C317 | WRTME LD 3 23 | GET RETURN SE | 80707170 | • | | * | | | 807 | 707850 |
| 0A6C 0 D101 | STO 1 1 | SAVE RETURN | 80707180 | | | * | CK N | UMBER RETRYS | | 707860 |
| 0A6D 0 4326 | BSI 3 38 | GO CK DR FOR BUSY SRO | | | | * | | | | 0707870 |
| | | 5.00 | | | | | | CET COOCO CTOL | | |
| 046F 0 1010 | | | 80707200 | | 0AA0 0 C215 | WRITHIN | 2 21 | | 9N7 | |
| 0A6E 0 1010 | SLA 16 | CIEAD EDDAD CONTON | 80707200 | | 0AA0 0 C215 | WRTIH LD | 2 21 | GET ERROR CTRL | | 0707880 |
| 0A6F 0 D215 | SLA 16 STO 2 21 | CLEAR ERROR CONTROL | 80707210 | | OAA1 0 9300 | S | 3 0 | SUB 2 | 807 | 707890 |
| 0A6F 0 D215 0A70 0 4326 | SLA 16 STO 2 21 WRTB BSI 3 38 | GD CK DR FDR BUSY SRC | 80707210 80707220 | | 0AA1 0 9300 0AA2 1 4 C18 0AA9 | S BSC | 3 0 L WRTII,&- | SUB 2 BRANCH # 3 RETRYS | 807 807 | 0707890 0707900 |
| 0A6F 0 D215 0A70 0 4326 0A71 0 C123 | SLA 16 STO 221 WRTB BSI 338 LD 135 | GD CK DR FDR BUSY SRC GET WRT FNC & MOD | 80707210 80707220 80707230 | | OAA1 O 9300 OAA2 1 4C18 OAA9 OAA4 O B3O1 | S BSC A | 3 0 L WRTII,& 3 1 | SUB 2 BRANCH # 3 RETRYS ADD 3 | 807 807 807 | 0707890 0707900 0707910 |
| 0A6F 0 D215 0A70 0 4326 | SLA 16 STO 2 21 WRTB BSI 3 38 | GD CK DR FDR BUSY SRC | 80707210 80707220 80707230 80707240 | | OAA1 O 9300 OAA2 1 4C18 OAA9 OAA4 O B301 OAA5 O D215 | S BSC A STD | 3 0 L WRTII,&- 3 1 2 21 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE | 807 807 807 807 | 0707890 0707900 0707910 0707920 |
| 0A6F 0 D215 0A70 0 4326 0A71 0 C123 | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 | GD CK DR FDR BUSY SRC GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC | 80707210 80707220 80707230 80707240 80707250 | | OAA1 O 9300 OAA2 1 4C18 OAA9 OAA4 O B3O1 OAA5 O D215 OAA6 O 430E | S BSC A STD BSI | 3 0 L WRTII,&- 3 1 2 21 3 14 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE | 807 807 807 807 | 707890 707900 707910 |
| 0A6F 0 D215 0A70 0 4326 0A71 0 C123 | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 | GD CK DR FDR BUSY SRC GET WRT FNC & MOD | 80707210 80707220 80707230 80707240 | | OAA1 O 9300 OAA2 1 4C18 OAA9 OAA4 O B301 OAA5 O D215 | S BSC A STD | 3 0 L WRTII,&- 3 1 2 21 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE | 807 807 807 807 SRC 807 | 0707890 0707900 0707910 0707920 |
| 0A6F 0 D215 0A70 0 4326 0A71 0 C123 | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * | GD CK DR FDR BUSY SRC GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC | 80707210 80707220 80707230 80707240 80707250 | | OAA1 O 9300 OAA2 1 4C18 OAA9 OAA4 O B3O1 OAA5 O D215 OAA6 O 430E | S BSC A STD BSI | 3 0 L WRTII,&- 3 1 2 21 3 14 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE | 807 807 807 807 SRC 807 SRC 807 | 0707890 0707900 0707910 0707920 0707930 |
| 0A6F 0 D215 0A70 0 4326 0A71 0 C123 | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * | GD CK DR FDR BUSY SRC GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC | 80707210 80707220 80707230 80707240 80707250 80707260 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D | S BSC A STD BSI BSI | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE | 807 807 807 807 807 SRC 807 SRC 807 | 0707890 0707900 0707910 0707920 0707930 |
| OA6F 0 D215 OA70 0 4326 OA71 0 C123 OA72 0 4349 | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * | GD CK DR FDR BUSY SRO GET WRT FNC & MOD GD SET UP&ISSUE CMD SRO WRITE COMPLETE ROUTINE | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 | * | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D | S BSC A STD BSI BSI | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE | 807 807 807 807 SRC 807 SRC 807 807 | 0707890 0707900 0707910 0707920 0707930 0707940 0707950 |
| OA6F O D215 OA7O O 4326 OA71 O C123 OA72 O 4349 OA73 O C20C OA74 O B124 | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 | GD CK DR FDR BUSY SRO GET WRT FNC & MOD GD SET UP&ISSUE CMD SRO WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707280 | * . | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D | S BSC A STD BSI BSI | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE | 807 807 807 807 SRC 807 SRC 807 807 | 0707890 0707900 0707910 0707920 0707930 0707940 0707950 0707960 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C20C OA74 O B124 OA75 O D20C | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 A 1 36 STO 2 12 | GD CK DR FDR BUSY SRC GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707280 80707290 80707300 | * | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D | S BSC A STD BSI BSI | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE | 807 807 807 807 SRC 807 SRC 807 807 807 | 0707890 0707900 0707910 0707920 0707930 0707940 0707950 0707960 0707960 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C20C OA74 O B124 OA75 O D20C OA76 O C20A | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 A 1 36 STO 2 12 LD 2 10 | GD CK DR FDR BUSY SRC GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707280 80707290 80707310 | * | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D | S BSC A STD BSI BSI | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT | 807 807 807 807 807 SRC 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707930 0707940 0707950 0707960 0707970 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C20C OA74 O B124 OA75 O D20C OA76 O C20A OA77 O B124 | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 A 1 36 STO 2 12 LD 2 10 A 1 36 | GD CK DR FDR BUSY SRO GET WRT FNC & MOD GD SET UP&ISSUE CMD SRO WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707280 80707290 80707310 80707310 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D | S BSC A STD BSI BSI | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE | 807 807 807 807 807 SRC 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707930 0707940 0707950 0707960 0707970 0707980 |
| 0A6F 0 D215 0A70 0 4326 0A71 0 C123 0A72 0 4349 0A73 0 C20C 0A74 0 B124 0A75 0 D20C 0A76 0 C20A 0A77 0 B124 0A78 0 D20A | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 A 1 36 STO 2 10 A 1 36 STO 2 10 | GD CK DR FDR BUSY SRO GET WRT FNC & MOD GD SET UP&ISSUE CMD SRO WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE SAVE | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707290 80707390 80707310 80707320 80707330 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 | S BSC A STD BSI BSI MDX * * * | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT C ERROR | 807 807 807 807 807 SRC 807 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707930 0707940 0707950 0707960 0707970 0707980 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C20C OA74 O B124 OA75 O D20C OA76 O C20A OA77 O B124 OA78 O D20A OA79 O 4351 | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * WRTI LD 2 12 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 | GD CK DR FDR BUSY GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE SRC | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707280 80707290 80707300 80707310 80707320 80707330 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 | S BSC A STD BSI BSI MDX * * WRTII LD | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT C ERROR GET UNREC WT CT | 807 807 807 807 SRC 807 SRC 807 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707930 0707950 0707950 0707960 0707970 0707980 0707990 0708010 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C20C OA74 O B124 OA75 O D20C OA76 O C20A OA77 O B124 OA78 O D20A OA79 O 4351 OA7A O C208 | SLA 16 STO 2 21 WRTB 8SI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 WRTIALD 2 8 | GD CK DR FDR BUSY SRO GET WRT FNC & MOD GD SET UP&ISSUE CMD SRO WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE SRO GET SENSE WD | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707280 80707290 80707300 80707310 80707320 80707330 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 | S BSC A STD BSI BSI MDX * * * WRTII LD A | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT C ERROR GET UNREC WT CT ADD ONE | 807 807 807 807 SRC 807 SRC 807 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707930 0707950 0707950 0707960 0707990 0707990 0708000 0708020 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C20C OA74 O B124 OA75 O D20C OA76 O C20A OA77 O B124 OA78 O D20A OA79 O 4351 OA7A O C208 OA7B O E034 | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 WRTIA LD 2 8 AND WRIX4 | GD CK DR FDR BUSY SRO GET WRT FNC & MOD GD SET UP&ISSUE CMD SRO WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE SRO GET SENSE WD CK FOR ERROR | 80707210 80707220 80707230 80707250 80707250 80707260 80707270 80707280 80707390 80707310 80707320 80707320 80707340 80707350 80707360 | * . | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 | S BSC A STD BSI BSI MDX * * * WRTII LD A STO | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT C ERROR GET UNREC WT CT | 807 807 807 807 807 SRC 807 807 807 807 807 807 807 | 0707890 0707900 0707910 0707910 0707920 0707950 0707950 0707960 0707970 0707980 0708010 0708010 0708020 0708040 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C2OC OA74 O B124 OA75 O D2OC OA76 O C2OA OA77 O B124 OA78 O D2OA OA79 O 4351 OA7A O C2OB OA7B O EO34 OA7C O 4B2O | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 WRTIA LD 2 8 AND BSC Z | GD CK DR FDR BUSY GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE SRC GET SENSE WD CK FOR ERROR SKIP # DK | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707280 80707290 80707310 80707310 80707340 80707340 80707350 80707350 80707370 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 | S BSC A STD BSI BSI MDX * * * WRTII LD A STO | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB UNRE 2 19 1 36 2 19 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT C ERROR GET UNREC WT CT ADD ONE SAVE | 807 807 807 807 807 SRC 807 807 807 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707930 0707940 0707950 0707960 0707970 0707980 0708010 0708010 0708020 0708030 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C2OC OA74 O B124 OA75 O D2OC OA76 O C2OA OA77 O B124 OA78 O D2OA OA79 O 4351 OA7A O C208 OA7B O E034 OA7C O 4820 OA7D O 701B | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 WRTIA LD 2 8 AND BSC 7 MDX WRTIE | GD CK DR FDR BUSY GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE CDMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE GET SENSE WD CK FOR ERROR SKIP # DK BAD DSW | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707280 80707290 80707310 80707310 80707330 80707340 80707340 80707350 80707360 80707370 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 OAA9 0 C213 OAAA 0 8124 OAAB 0 D213 | S BSC A STD BSI BSI MDX * * * WRTII LD A STO * BSI | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB UNRE 2 19 1 36 2 19 3 11 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT C ERROR GET UNREC WT CT ADD ONE SAVE GO TO PRINT VIA MER | 807 807 807 807 807 SRC 807 807 807 807 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707940 0707950 0707960 0707970 0707970 0708000 0708010 0708020 0708030 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C2OC OA74 O B124 OA75 O D2OC OA76 O C2OA OA77 O B124 OA78 O D2OA OA79 O 4351 OA7A O C2OB OA7B O EO34 OA7C O 4B2O | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 WRTIA LD 2 8 AND BSC Z | GD CK DR FDR BUSY GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE SRC GET SENSE WD CK FOR ERROR SKIP # DK | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707280 80707290 80707310 80707310 80707340 80707340 80707350 80707350 80707370 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 | S BSC A STD BSI BSI MDX * * * WRTII LD A STO | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB UNRE 2 19 1 36 2 19 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT C ERROR GET UNREC WT CT ADD ONE SAVE | 807 807 807 807 807 SRC 807 807 807 807 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707930 0707940 0707950 0707960 0707970 0707980 0708010 0708010 0708020 0708030 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C2OC OA74 O B124 OA75 O D2OC OA76 O C2OA OA77 O B124 OA78 O D2OA OA79 O 4351 OA7A O C208 OA7B O E034 OA7C O 4820 OA7D O 701B | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 WRTIA LD 2 8 AND BSC 7 MDX WRTIE | GD CK DR FDR BUSY GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE CDMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE GET SENSE WD CK FOR ERROR SKIP # DK BAD DSW | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707280 80707290 80707310 80707310 80707330 80707340 80707340 80707350 80707360 80707370 | * . | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 OAA9 0 C213 OAAA 0 8124 OAAB 0 D213 | S BSC A STD BSI BSI MDX * * * WRTII LD A STO * BSI | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB UNRE 2 19 1 36 2 19 3 11 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT C ERROR GET UNREC WT CT ADD ONE SAVE GO TO PRINT VIA MER | 807 807 807 807 807 SRC 807 807 807 807 807 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707940 0707950 0707960 0707970 0707980 0708000 0708010 0708020 0708030 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C20C OA74 O B124 OA75 O D20C OA76 O C20A OA77 O B124 OA78 O D20A OA79 O 4351 OA7A O C208 OA7B O E034 OA7C O 4B20 OA7D O 701B OA7E 1 C400 0802 OA8O O 1008 | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 WRTIA LD 2 8 AND WRIXA BSC Z MDX WRIXA LD L SWO | GD CK DR FDR BUSY GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE SRC GET SENSE WD CK FOR ERROR SKIP # DK BAD DSW GET SW FNC O | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707290 80707310 80707310 80707330 80707340 80707350 80707360 80707360 80707370 80707380 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 B301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 OAA9 0 C213 OAAA 0 8124 OAAB 0 D213 OAAC 0 430B OAAD 0 E003 | S BSC A STD BSI BSI MDX * * * WRTII LD A STO BSI DC | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB UNRE 2 19 1 36 2 19 3 11 /E003 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GO WRT C ERROR GET UNREC WT CT ADD ONE SAVE GO TO PRINT VIA MER ID 03 LINE 0 - FDRM 2 | 807 807 807 807 SRC 807 807 807 807 807 807 807 807 807 807 | 0707890 0707910 0707910 0707920 0707930 0707940 0707960 0707960 0707990 0708010 0708010 0708040 0708040 0708050 0708060 |
| 0A6F 0 D215 0A70 0 4326 0A71 0 C123 0A72 0 4349 0A73 0 C20C 0A74 0 B124 0A75 0 D20C 0A76 0 C20A 0A77 0 B124 0A78 0 D20A 0A79 0 4351 0A7A 0 C208 0A7B 0 E034 0A7C 0 4820 0A7D 0 701B 0A7E 1 C400 0802 | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 WRTIA LD 2 8 AND BSC 7 MDX WRTIE LD L SWO SLA 8 | GD CK DR FDR BUSY GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE SRC GET SENSE WD CK FOR ERROR SKIP # DK BAD DSW GET SW FNC O | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707280 80707300 80707310 80707320 80707320 80707360 80707360 80707360 80707360 80707370 80707380 80707380 80707390 80707390 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 OAA9 0 C213 OAAA 0 8124 OAAB 0 D213 OAAC 0 430B OAAD 0 E003 OAAE 0 0002 | S BSC A STD BSI BSI MDX * * * WRTII LD A STO * BSI DC DC | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB UNRE 2 19 1 36 2 19 3 11 /E003 /0002 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT C ERROR GET UNREC WT CT ADD ONE SAVE GO TO PRINT VIA MER ID 03 | 807 807 807 807 SRC 807 807 807 807 807 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707930 0707950 0707950 0707960 0707990 0708000 0708010 0708040 0708050 0708050 0708050 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C20C OA74 O B124 OA75 O D20C OA76 O C20A OA77 O B124 OA78 O D20A OA79 O 4351 OA7A O C208 OA7B O E034 OA7C O 4820 OA7D O 701B OA7E 1 C400 O802 OA80 O 1008 OA81 1 4C10 OA94 | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 WRTIA LD 2 8 AND WRIX4 BSC Z MDX WRTIE LD L SWO SLA 8 BSC L WRTO | GD CK DR FDR BUSY GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE GET SENSE WD CK FOR ERROR SKIP # DK BAD DSW GET SW FNC O BRANCH # EOT SW OFF | 80707210 80707220 80707230 80707250 80707250 80707260 80707280 80707280 80707300 80707310 80707320 80707320 80707350 80707340 80707360 80707360 80707370 80707370 80707380 80707390 807074400 807074400 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 OAA9 0 C213 OAAA 0 8124 OAAB 0 D213 OAAC 0 430B OAAD 0 E003 OAAE 0 0002 | S BSC A STD BSI BSI MDX * * * WRTII LD A STO * BSI DC DC | 3 0 L WRTII, & 3 1 2 21 3 14 3 29 WRTB UNRE 2 19 1 36 2 19 3 11 /E003 /0002 WRTIC | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT C ERROR GET UNREC WT CT ADD ONE SAVE GO TO PRINT VIA MER ID 03 LINE 0 - FDRM 2 CONTINUE | 807 807 807 807 SRC 807 807 807 807 807 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707930 0707940 0707950 0707970 0707980 0707990 0708010 0708020 0708050 0708050 0708060 0708060 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C2OC OA74 O B124 OA75 O D2OC OA76 O C2OA OA77 O B124 OA78 O D2OA OA77 O B124 OA78 O D2OA OA79 O 4351 OA7A O C208 OA7B O E034 OA7C O 4820 OA7D O 701B OA7E 1 C400 O802 OA8O O 1008 OA81 1 4C10 OA94 OAB3 O C208 | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 WRTIA LD 2 8 GD CK DR FDR BUSY GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE GET SENSE WD CK FOR ERROR SKIP # DK BAD DSW GET SW FNC O BRANCH # EOT SW OFF GET SENSE WD | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707290 80707300 80707310 80707320 80707340 80707340 80707340 80707360 80707360 80707360 80707370 80707390 80707390 80707400 80707410 80707420 80707430 | * . | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 OAA9 0 C213 OAAA 0 8124 OAAB 0 D213 OAAC 0 430B OAAD 0 E003 OAAE 0 0002 | S BSC A STD BSI BSI MDX * * * * * WRTII LD A STO * BSI DC DC MDX * | 3 0 L WRTII, & 3 1 2 21 3 14 3 29 WRTB UNRE 2 19 1 36 2 19 3 11 /E003 /0002 WRTIC | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GO WRT C ERROR GET UNREC WT CT ADD ONE SAVE GO TO PRINT VIA MER ID 03 LINE 0 - FDRM 2 | 807 807 807 807 807 SRC 807 807 807 807 807 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707940 0707950 0707960 0707970 0707980 0708010 0708020 0708050 0708050 0708070 0708070 0708080 0708070 0708080 0708080 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C2OC OA74 O B124 OA75 O D20C OA76 O C2OA OA77 O B124 OA78 O D20A OA79 O 4351 OA7A O C208 OA7B O E034 OA7C O 4B2O OA7C O 4B2O OA7D O 701B OA7E 1 C400 O802 OA80 O 1008 OA81 1 4C10 OA94 OAB3 O C208 OA84 O E346 | SLA 16 STO 2 21 WRTB 8SI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 LD 2 10 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 WRTIA LD 2 8 AND WRIX4 BSC VRIXE LD L SWO SLA 8 BSC L WRTO * WRTO2 LD 2 8 AND 3 70 | GD CK DR FDR BUSY GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE CDMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE GET SENSE WD CK FOR ERROR SKIP # DK BAD DSW GET SW FNC O PRANCH # EOT SW OFF GET SENSE WD CK FOR EOT | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707290 80707310 80707310 80707330 80707340 80707340 80707350 80707360 80707360 80707370 80707370 80707390 80707390 80707400 80707440 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 OAA9 0 C213 OAAA 0 8124 OAAB 0 D213 OAAC 0 430B OAAD 0 E003 OAAE 0 0002 OAAF 0 70DB | S BSC A STD BSI BSI MDX * * * * * * * * * * * * * * * * * * * | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB UNRE 2 19 1 36 2 19 3 11 /E003 /0002 WRTIC CONS | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT C ERROR GET UNREC WT CT ADD ONE SAVE GO TO PRINT VIA MER ID 03 LINE 0 - FDRM 2 CDNTINUE TANTS | 807 807 807 807 807 SRC 807 807 807 807 807 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707940 0707950 0707960 0707970 0707980 0708010 0708020 0708040 0708050 0708060 0708060 0708060 0708060 0708060 0708060 0708060 0708060 0708060 0708060 0708060 0708060 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C20C OA74 O B124 OA75 O D20C OA76 O C20A OA77 O B124 OA78 O D20A OA79 O 4351 OA7A O C208 OA7B O E034 OA7C O 4820 OA7C O 4820 OA7D O 701B OA7E 1 C400 O802 OA80 O 1008 OA81 1 4C10 OA94 OAB3 O C208 OA84 O E346 OA85 O 4820 | SLA 16 STO 2 21 WRTB 8SI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 LD 2 10 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 WRTIA LD 2 8 AND BSC 7 MDX WRTIA LD L SWO SLA 8 BSC L WRTO * WRTO2 LD 2 8 AND 3 70 BSC 7 | GD CK DR FDR BUSY GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE GET SENSE WD CK FOR ERROR SKIP # DK BAD DSW GET SW FNC O BRANCH # EOT SW OFF GET SENSE WD CK FOR EOT SKIP # NOT EOT | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707280 80707300 80707310 80707320 80707320 80707350 80707360 80707360 80707360 80707360 80707370 80707400 80707400 80707440 80707420 80707440 80707440 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 OAA9 0 C213 OAAA 0 8124 OAAB 0 D213 OAAC 0 430B OAAC 0 430B OAAC 0 430B OAAC 0 70DB OABO 0 2F83 | S BSC A STD BSI BSI MDX * * * WRTII LD A STO * BSI DC DC MDX * WRIX4 DC | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB UNRE 2 19 1 36 2 19 3 11 /E003 /0002 WRTIC CONS /2F83 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT C ERROR GET UNREC WT CT ADD ONE SAVE GO TO PRINT VIA MER ID 03 LINE 0 - FDRM 2 CONTINUE TANTS DSW ERROR CK | 807 807 807 807 SRC 807 807 807 807 807 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707930 0707950 0707960 0707960 0707990 0708010 0708050 0708060 0708060 0708060 0708060 0708060 0708080 0708080 0708080 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C20C OA74 O B124 OA75 O D20C OA76 O C20A OA77 O B124 OA78 O D20A OA79 O 4351 OA7A O C208 OA7B O E034 OA7C O 4B20 OA7C O 4B20 OA7D O 701B OA7E 1 C400 O802 OA80 O 1008 OA81 1 4C10 OA94 OAB3 O C208 OA83 O C208 OA84 O E346 OA85 O 4820 OA86 O 431A | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 LD 2 10 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 WRTIA LD 2 8 AND BSC 7 MDX WRTIE LD L SWO SLA 8 BSC L WRTO * WRTO2 LD 2 8 AND 3 70 BSC 7 WRTO3 BSI 3 26 | GD CK DR FDR BUSY GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE GET SENSE WD CK FOR ERROR SKIP # DK BAD DSW GET SW FNC O BRANCH # EOT SW OFF GET SENSE WD CK FOR EOT SKIP # NOT EOT GD WRT TM SRC | 80707210 80707220 80707230 80707250 80707250 80707250 80707270 80707280 80707280 80707310 80707310 80707320 80707340 80707350 80707360 80707360 80707360 80707360 80707400 80707400 80707400 80707440 80707440 80707440 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 OAA9 0 C213 OAAA 0 8124 OAAB 0 D213 OAAC 0 430B OAAD 0 E003 OAAE 0 O002 OAAF 0 70DB | S BSC A STD BSI BSI MDX * * * WRTII LD A STO * BSI DC DC MDX * WRIX4 DC WRIX6 DC | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB UNRE 2 19 1 36 2 19 3 11 /E003 /0002 WRTIC CONS /2F83 /2C13 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT C ERROR GET UNREC WT CT ADD ONE SAVE GO TO PRINT VIA MER ID 03 LINE 0 - FDRM 2 CDNTINUE TANTS DSW ERROR CK NONCORR ERROR CK | 807 807 807 807 SRC 807 807 807 807 807 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707940 0707950 0707950 0707960 0707990 0708000 0708000 0708050 0708050 0708060 0708060 0708060 0708060 0708060 0708060 0708060 0708060 0708060 0708060 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C2OC OA74 O B124 OA75 O D2OC OA76 O C2OA OA77 O B124 OA78 O D2OA OA77 O 8124 OA78 O D2OA OA79 O 4351 OA7A O C208 OA7B O E034 OA7C O 4820 OA7D O 701B OA7E 1 C400 O802 OA8O O 1008 OA81 1 4C10 OA94 OAB3 O C208 OA84 O E346 OA85 O 4820 OA86 O 431A OA87 O D207 | SLA 16 STO 2 21 WRTB 8SI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 LD 2 10 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 WRTIA LD 2 8 AND WRIX4 BSC Z MDX WRTIE LD L SWO SLA 8 BSC L WRTO * WRTO2 LD 2 8 AND 3 70 BSC Z WRTO3 BSI 3 26 WRIAI STO 2 7 | GD CK DR FDR BUSY GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE GET SENSE WD CK FOR ERROR SKIP # DK BAD DSW GET SW FNC O BRANCH # EOT SW OFF GET SENSE WD CK FOR EOT SKIP # NOT EOT GD WRT TM SRC | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707280 80707300 80707310 80707320 80707330 80707350 80707340 80707360 80707360 80707370 80707360 80707360 80707360 80707440 80707440 80707440 80707440 80707440 80707440 80707440 80707440 80707440 80707440 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 OAA9 0 C213 OAAA 0 8124 OAAB 0 D213 OAAC 0 430B OAAC 0 430B OAAC 0 430B OAAC 0 70DB OABO 0 2F83 | S BSC A STD BSI BSI MDX * * * * WRTII LD A STO C DC MDX * * * WRIX4 DC WRIX7 DC WRIX7 DC | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB UNRE 2 19 1 36 2 19 3 11 /E003 /0002 WRTIC CONS /2F83 /2C13 501 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT C ERROR GET UNREC WT CT ADD ONE SAVE GO TO PRINT VIA MER ID 03 LINE 0 - FDRM 2 CONTINUE TANTS DSW ERROR CK NONCORR ERROR CK CONSTANT 501 | 807 807 807 807 SRC 807 807 807 807 807 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707930 0707950 0707950 0707970 0707970 0708000 0708010 0708020 0708050 0708050 0708060 0708050 0708080 0708080 0708080 0708080 0708110 0708120 0708130 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C2OC OA74 O B124 OA75 O D2OC OA76 O C2OA OA77 O B124 OA78 O D2OA OA77 O 4351 OA7A O C2OB OA7B O E034 OA7C O 4820 OA7D O 701B OA7E 1 C400 O802 OA8O O 1008 OA81 1 4C10 OA94 OAB3 O C208 OA84 O E346 OA85 O 4820 OA86 O 431A OA87 O D207 OA88 O C215 | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 WRTIA LD 2 8 AND WRIX4 BSC Z MDX WRTIS LD L SWO SLA B BSC L WRTO * WRTO2 LD 2 8 AND 3 70 BSC Z WRTO3 BSI 3 26 WRIAI STO 2 7 LD 2 21 | GD CK DR FDR BUSY GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE GET SENSE WD CK FOR ERROR SKIP # DK BAD DSW GET SW FNC O BRANCH # EOT SW OFF GET SENSE WD CK FOR EOT SKIP # NOT EOT GO WRT TM SRC LD TM SW GET ERROR CTL | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707280 80707300 80707310 80707320 80707340 80707340 80707340 80707340 80707340 80707340 80707340 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707460 80707440 80707440 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 OAA9 0 C213 OAAA 0 8124 OAAB 0 D213 OAAC 0 430B OAAD 0 E003 OAAE 0 O002 OAAF 0 70DB | S BSC A STD BSI BSI MDX * * * * * * * WRTII LD A STO C DC MDX * * * * WRIX4 DC WRIX7 DC WRIX7 DC * * * * * * * * * * * * * * * * * * | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB UNRE 2 19 1 36 2 19 3 11 /E003 /0002 WRTIC CONS /2F83 /2C13 501 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT C ERROR GET UNREC WT CT ADD ONE SAVE GO TO PRINT VIA MER ID 03 LINE 0 - FDRM 2 CDNTINUE TANTS DSW ERROR CK NONCORR ERROR CK | 807 807 807 807 807 SRC 807 807 807 807 807 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707930 0707950 0707960 0707970 0707970 0708000 0708010 0708050 0708050 0708070 0708070 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 |
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| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C2OC OA74 O B124 OA75 O D2OC OA76 O C2OA OA77 O B124 OA78 O D2OA OA77 O B124 OA78 O D2OA OA79 O 4351 OA7A O C208 OA7B O E034 OA7C O 4820 OA7D O 701B OA7E 1 C400 O802 OA80 O 1008 OA81 1 4C10 OA94 OAB3 O C208 OA84 O E346 OA85 O 4820 OA86 O 431A OA87 O D207 OA88 O C215 | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 WRTIA LD 2 8 AND WRIX4 BSC Z MDX WRTIS LD L SWO SLA B BSC L WRTO * WRTO2 LD 2 8 AND 3 70 BSC Z WRTO3 BSI 3 26 WRIAI STO 2 7 LD 2 21 | GD CK DR FDR BUSY GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE GET SENSE WD CK FOR ERROR SKIP # DK BAD DSW GET SW FNC O BRANCH # EOT SW OFF GET SENSE WD CK FOR EOT SKIP # NOT EOT GO WRT TM SRC LD TM SW GET ERROR CTL | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707280 80707300 80707310 80707320 80707340 80707340 80707340 80707340 80707340 80707340 80707340 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707460 80707440 80707440 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 OAA9 0 C213 OAAA 0 8124 OAAB 0 D213 OAAC 0 430B OAAD 0 E003 OAAE 0 O002 OAAF 0 70DB | S BSC A STD BSI BSI MDX * * * * * * * WRTII LD A STO C DC MDX * * * * WRIX4 DC WRIX7 DC WRIX7 DC * * * * * * * * * * * * * * * * * * | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB UNRE 2 19 1 36 2 19 3 11 /E003 /0002 WRTIC CONS /2F83 /2C13 501 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT C ERROR GET UNREC WT CT ADD ONE SAVE GO TO PRINT VIA MER ID 03 LINE 0 - FDRM 2 CONTINUE TANTS DSW ERROR CK NONCORR ERROR CK CONSTANT 501 | 807 807 807 807 807 SRC 807 807 807 807 807 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707940 0707950 0707960 0707970 0707990 0708010 0708020 0708050 0708050 0708060 0708060 0708070 0708080 0708080 0708080 0708080 0708110 0708120 0708130 |
| OA6F O D215 OA70 O 4326 OA71 O C123 OA72 O 4349 OA73 O C2OC OA74 O B124 OA75 O D2OC OA76 O C2OA OA77 O B124 OA78 O D2OA OA77 O 4351 OA7A O C2OB OA7B O E034 OA7C O 4820 OA7D O 701B OA7E 1 C400 O802 OA8O O 1008 OA81 1 4C10 OA94 OAB3 O C208 OA84 O E346 OA85 O 4820 OA86 O 431A OA87 O D207 OA88 O C215 | SLA 16 STO 2 21 WRTB BSI 3 38 LD 1 35 BSI 3 73 * * WRTI LD 2 12 A 1 36 STO 2 12 LD 2 10 A 1 36 STO 2 10 BSI 3 81 WRTIA LD 2 8 AND WRIX4 BSC Z MDX WRTIS LD L SWO SLA B BSC L WRTO * WRTO2 LD 2 8 AND 3 70 BSC Z WRTO3 BSI 3 26 WRIAI STO 2 7 LD 2 21 | GD CK DR FDR BUSY GET WRT FNC & MOD GD SET UP&ISSUE CMD SRC WRITE COMPLETE ROUTINE GET TOTAL WRT CT ADD DNE SAVE GET REC CT ADD ONE SAVE GO RELEASE DEVICE GET SENSE WD CK FOR ERROR SKIP # DK BAD DSW GET SW FNC O BRANCH # EOT SW OFF GET SENSE WD CK FOR EOT SKIP # NOT EOT GO WRT TM SRC LD TM SW GET ERROR CTL | 80707210 80707220 80707230 80707240 80707250 80707260 80707270 80707280 80707300 80707310 80707320 80707340 80707340 80707340 80707340 80707340 80707340 80707340 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707360 80707460 80707440 80707440 | | OAA1 0 9300 OAA2 1 4C18 OAA9 OAA4 0 8301 OAA5 0 D215 OAA6 0 430E OAA7 0 431D OAA8 0 70C7 OAA9 0 C213 OAAA 0 8124 OAAB 0 D213 OAAC 0 430B OAAD 0 E003 OAAE 0 O002 OAAF 0 70DB | S BSC A STD BSI BSI MDX * * * * * * * WRTII LD A STO C DC MDX * * * * WRIX4 DC WRIX7 DC WRIX7 DC * * * * * * * * * * * * * * * * * * | 3 0 L WRTII,&- 3 1 2 21 3 14 3 29 WRTB UNRE 2 19 1 36 2 19 3 11 /E003 /0002 WRTIC CONS /2F83 /2C13 501 | SUB 2 BRANCH # 3 RETRYS ADD 3 SAVE GD BACKSPACE GO ERASE GD WRT C ERROR GET UNREC WT CT ADD ONE SAVE GO TO PRINT VIA MER ID 03 LINE 0 - FDRM 2 CONTINUE TANTS DSW ERROR CK NONCORR ERROR CK CONSTANT 501 | 807 807 807 807 807 SRC 807 807 807 807 807 807 807 807 807 807 | 0707890 0707900 0707910 0707920 0707930 0707950 0707960 0707970 0707970 0708000 0708010 0708050 0708050 0708070 0708070 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 0708080 |
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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2400 FUNCTION TEST

PART NO. 2196370 PAGE

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2400 FUNCTION TEST

PART NO. 2196370 PAGE

80708860

| | * THIS | IS THE ERASE ROUTINE | 80708190 | 0ADD 1 4C20 0B57 |
|---------------------------------------|-----------------------------------|--|----------------------|---------------------------------|
| | # | | 80709190 | |
| | * *** *** *** *** *** | * *** *** *** *** | 80708200 | 0AOF 0 C200 |
| DAB3 0 C31D | ERAE LD 329 | GET RETURN SE | 80708210 | OAEO 0 8124 |
| AB4 0 D102 | STO 1 2 | SAVE | 80709220 | 0AE1 0 D200 |
| DAB5 0 4326 | BSI 3 38 | GD CK DR FOR BUSY SRC | 90709230 | |
| DAB6 0 C103 | LD 13 | GET MOD & FNC | 80709240 | |
| AB7 0 4349 | 8\$1 3 73 | GO SET UP&ISSUE CMO SRC | 80709250 | 0452 0 5202 |
| | * | | 80708260 | 0AE2 0 C208 |
| | | COMPLETE RETURN | 80708270 | 0AE3 0 1802 0AE4 0 4804 |
| | * | 057 57.05 00.00 | 80708280 | 0AE5 0 702F |
| ABB 0 C214 | ERAB LD 2 20 | GET ERASE COUNT | 80708290 | 0AE6 0 1010 |
| AB9 0 8124 | A 1 36 | ADD 1 | 80708300 | 0AE7 0 D204 |
| ABA 0 D214 | STO 2 20 | SAVE | 80708310 | ORE 1 6 0204 |
| ABB 0 4351 | BSI 3 81 | GO RELEASE DEVICE SRC | 80709320 | |
| ABC 0 4DB0 0002 | BSC I1 2 * *** *** *** *** *** | EXIT SX | 80708330 | |
| | * | * *** *** *** *** *** | 80709340 80708350 | 0AE8 0 C208 |
| | | THE WRT TAPE MARK RTN | 80708360 | 0AE9 0 E0E9 |
| | * 1111.5 | THE HET TAPE PARK KIN | 80708370 | OAEA 0 4820 |
| | * *** *** *** *** *** | * *** *** *** *** | 80708370 | OAEB 0 7030 |
| ABE 0 C31A | WTME LD 3 26 | GET RETURN SE | 80708390 | |
| ABF 0 D104 | STO 1 4 | SAVE RETURN | 80708400 | |
| ACO 0 4326 | BSI 3 38 | GO CK DR FDR BUSY SRC | 80708410 | |
| AC1 0 C105 | LD 15 | GET FNC & MOD | 90709420 | OAEC 0 4372 |
| AC2 0 4349 | BS 1 3 73 | GO SET UPEISSUE CMD SRC | 80708430 | OAEO 1 C400 OB02 |
| ,,,,, | * | 00 32. 0. 010302 0.15 3.10 | 80708440 | OAEF 0 1007 |
| | | APE MARK COMPLETE | 80708450 | OAFO 1 4C28 OBO3 |
| | * | | 80709460 | 0AF2 0 C20A |
| AC3 0 4351 | WTMAB BSI 3 81 | GO RELEASE DEVICE SRC | 80708470 | 0AF3 0 9124 |
| AC4 0 C124 | LD 1 36 | GET ONE | 80708480 | OAF4 1 4C18 OBO3 |
| AC5 0 D207 | STO 2 7 | SET WRT TM SW | 80708490 | OAF6 0 F35E |
| DAC6 0 4D80 0004 | BSC II 4 | EXIT SX | 80708500 | OAF7 1 4C18 OBO3 |
| | * *** *** *** *** *** | * *** *** *** *** | 80708510 | OAF9 0 4372 |
| | * | | 80708520 | 0AFA 0 4308 |
| | * THIS | IS THE READ ROUTINE | 80708530 | 0AFB 0 A006 |
| | * | | 80708540 | OAFC 0 0004 |
| | * *** *** *** *** *** | | 80708550 | 0AFD 0 4372 |
| DACB 0 C314 | RDTE LD 3 20 | GET RETURN SE | 90708560 | 0AFE 0 C35E |
| DAC9 0 D106 | STO 1 6 | SAVE RETURN | 80708570 | 0AFF 0 B124 |
| DACA 0 4326 | BSI 3 38 | GO CK OR FOR BUSY SPC | 80709580 | 0B00 0 D20A |
| ACB 0 1010 | SLA 16 | | 80708590 | 0B01 1 7401 0AD7 0B03 0 432C |
| DACC 0 D215 | STO 2 21 | CLEAR ERROR CONTROL | 80709600 | 0803 0 4320 0804 1 7400 0AD7 |
| DACD 0 D107 | \$10 1 7 | CLEAR RETRY SW | 80708610 | 0806 0 7027 |
| ACE 0 4326 | RDT1 BSI 3 38 | GO CK OR FOR BUSY SRC | 80708620 | 0B07 0 C215 |
| ACF 0 1010 | SLA 16 Sto RDT8A | CLEAR ACCUM | 80708630 | 0B08 1 4C18 0B10 |
| DADO 0 DOO6 | | CLEAR ERROR SW | 80708640 | 0BOA 0 C210 |
| DAD1 0 C122 | LD 1 34 BSI 3 73 | GET READ MOD & FNC GO SET UP&ISSUE CMD SRC | 80708650 80708660 | 0B0B 0 8124 |
| AD2 0 4349 | b31 3 /3 | GC SET UPGISSUE CMS SRC | 90709670 | 0B0C 0 D210 |
| | * CDNST | ANITC | 90709680 | 0B0D 0 430B |
| | * | ANTS | 80708690 | 0B0E 0 A003 |
| AD3 0 2FB3 | RDTXA DC /2FB3 | DSW OK CK | 90708700 | 0B0F 0 0003 |
| AD4 0 3FCF | RDTXB DC /3FCF | WLR OR DIAG CK | 80708710 | 0B10 0 C106 |
| AD5 0 2C03 | RDTXD DC / 2C 03 | NON CORRECTABLE CK | 80708720 | 0B11 0 B124 |
| DAD6 0 00FF | RDTYO DC /OOFF | SAVE REREAD CT | 80708730 | 0B12 0 D106 |
| AD7 0 0000 | RDT8A DC 0 | ERROR SW | 80708740 | 0B13 0 4D80 0006 |
| , AD 1 0 0000 | * | ERROR OF | 80708750 | |
| | | COMPLETE ROUTINE | 90709760 | |
| | * | 00.11 22.12 11.00 11.12 | 90709770 | |
| DADB O CZQA | RDTI2 LD 2 10 | GET REC CT | 80709780 | 0B15 0 C209 |
| DAD9 0 8124 | A 1 36 | ADD ONE | 90708790 | OB16 0 8300 |
| DADA O DZOA | STO 2 10 | SAVE | 90709800 | 0B17 C 0209 |
| ADB 0 4351 | BSI 3 81 | GO RELEASE DEVICE SRC | 80708810 | 0B18 0 C124 |
| ··· • • • • • • • • • • • • • • • • • | * | 2 227232 3110 | 90709820 | 0B19 0 D204 |
| | | RETRY SW | 80708830 | OB1A 0 70F5 |
| | | • • | | 0B1B 0 70F4 |
| | * | | 80708840 | |
| OADC 0 C107 | * LD 17 | GET RETRY SW | 80708840 80708850 | |

| 0ADD 1 4020 0B37 | * | L KUTTATZ | BRANCH # REIKT | 807C8870 |
|---------------------------------|------------|---------------------|---|-------------------------------|
| 0AOF 0 C200 | LD | 2 13 | GET TOTAL RD CT | 80708980 |
| OAEO 0 8124 | A | 1 36 | ADC ONE | 80709890 |
| 0AE1 0 D200 | ŝto | 2 13 | ADC UNE | 80708900 |
| OALI O DZOB | * | 2 13 | | 80708910 |
| | * | CHECK | FOR TAPE MARK | 30708920 |
| | * | CITEOR | TON TAPE HARR | 8070893C |
| 0AE2 0 C208 | LD | 2 8 | GET SENSE WD | 807C8940 |
| 0AE3 0 1802 | SRA | 2 | SET SENSE ND | 80708950 |
| OAE4 0 4804 | вЅс | Ē | IS DR AT TM | 90708960 |
| 0AE5 0 702F | MOX | RDT29 | YES | 80708970 |
| 0AE6 0 1010 | RDT35 SLA | 16 | , = 3 | 80709980 |
| OAE7 0 D204 | RDT36 STO | 2 4 | SET IN TM SW | 90708990 |
| | * | - ' | | 80709000 |
| | * | CK IF | SENSE WD IS GOOD | 80709010 |
| | * | | | 80709020 |
| OAE8 0 C208 | LD | 28 | GET SENSE WD | 80709030 |
| 0AE9 0 E0E9 | AND | RDTXA | CK FOR EXPECTED | 80709340 |
| OAEA 0 4820 | BSC | Z | SKIP # OK | 80709050 |
| OAEB 0 7030 | MDX | RDT03 | DSW BAD | 80709060 |
| | * | | | 80709070 |
| | * | CHECK | RECORO CT | 80709080 |
| | * | | | 80709090 |
| OAEC 0 4372 | RDCKR BSI | 3 114 | GO SET INT IGNORE SRC | 80709100 |
| OAED 1 C400 0B02 | LD | L SWO | GET SW FNC O | 80709110 |
| OAEF 0 1007 | SLA | 7 | | 80709120 |
| OAFO 1 4C28 OBO3 | BSC | L CKDTA,&Z | BRANCH # CRC CK ON | 80709130 |
| 0AF2 0 C20A | ΓD | 2 10 | GET REC CT | 80709140 |
| 0AF3 0 9124 | \$ | 1 36 | SUB ONE | 80709150 |
| 0AF4 1 4C18 0B03 | ΒŽ | CKDTA | | \$ 80709160 |
| OAF6 0 F35E OAF7 1 4C18 OBO3 | EOR BSC | 3 94 | COMPARE WITH REC RD | 80709170 |
| OAF9 0 4372 | BS I | L CKDTA,&- 3 114 | BR = NO PREV ERR SET INTRPT IGNORE SRC | 80709180 |
| 0AFA 0 4308 | BSI | 3 8 | PRINT VIA MLG SRC | 80709190 807 0 9200 |
| 0AFB 0 A006 | DC | /A006 | ID 06 | 80709210 |
| OAFC 0 0004 | DC | /0004 | LINE 0 - FORM 4 | 80709220 |
| OAFD 0 4372 | BSI | 3 114 | SET INTRPT IGNORE SRC | 80709230 |
| OAFE O C35E | LD | 3 94 | GET REC NO READ | 80709240 |
| OAFF 0 B124 | A | 1 36 | ADD ONE | 80709250 |
| 0B00 0 D20A | STO | 2 10 | SET AS EXPECTED | 80709260 |
| OBO1 1 7401 OAD7 | MDX | L ROT8A,1 | INCR ERRDR SW | 80709270 |
| 0B03 0 432C | CKDTA BSI | 3 44 | GO CK DATA SRC | 80709280 |
| 0B04 1 7400 0AD7 | MDX | L ROT8A,0 | IS ERROR SW # 0 | 80709290 |
| OBO6 O 7027 | MDX | RDT37 | NO-RETRY | 80709300 |
| 0B07 0 C215 | ROT30 LD | 2 21 | GET ERROR CTRL | 80709310 |
| OBO8 1 4C18 OB10 | BSC | L RDT19,+- | 9RANCH = NO PREV ERR | 80709320 |
| OBOA O C210 | LD | 2 16 | GET RECOVERED RD CT | 8 07 09330 |
| OBOB O 8124 | A | 1 36 | ADD ONE | 80709340 |
| 0B0C 0 D210 | STD | 2 16 | SAVE | 90709350 |
| 0B0D 0 430B | BSI | 3 8 | PRINT VIA MLG SRC | 80709360 |
| 0B0E 0 A003 | DC | /A003 | ID 03 | 80709370 |
| 0B0F 0 0003 | DC | /0003 | LINE 0 - FORM 3 | 80709380 |
| 0B10 0 C106 | RD T19 LD | 1 6 | GET RETURN | 80709390 |
| 0B11 0 B124 | A | 1 36 | ADD ONE | 80709400 |
| 0B12 0 D106 | STD | 1 6 | SAVE | 80709410 |
| OB13 O 4D80 0006 | BSC | 11 6 | EXIT SX | 80709420 |
| | * | O TO | CV TH DEAD | 80709430 |
| | * | 9 IRA | CK TM READ | 80709440 80709450 |
| OB15 O C209 | RDT29 LD | 2 9 | GET TAPE PASS CT | 80709450 |
| OB16 0 8300 | A A | 3 0 | ADD 2 | 80709470 |
| 0B17 C 0209 | STO | 2 9 | SAVE | 80709470 |
| OB18 O C124 | LD | 1 36 | GET ONE | 80709490 |
| 0B19 0 D204 | STO | 2 4 | SET TM SW | 80709500 |
| OB1A 0 70F5 | MDX | RDT19 | Jn | 80709510 |
| 0818 0 70F4 | MDX | RDT19 | | 80709520 |
| | * | ····· | | 80709530 |
| | | | | |
| | | | | |

BSC L RDT7A, Z BRANCH # RETRY

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| | * | DSW WA | S NOT CORRECT | | 80709540 |
|--|------------------|------------------|-------------------------------------|------|----------------------|
| | * | | | | 80709550 |
| 0B1C 0 C208 | RDT03 LD | 2 8 | GET SENSE WD | | 80709560 |
| OBID O EOB7 OBIE O 4820 | AND | RDTXD | CK FOR CORRECTABLE | | 80709570 |
| 081F 0 703C | BSC MDX | 7 | SKIP # CORRECTABLE | | 80709580 |
| 0B20 0 4308 | BSI | RDT18 3 8 | NDT CORRECTABLE GD TO PRINT VIA MLG | SRC | 80709590 |
| 0B21 0 A004 | DC | /A004 | ID 04 | SKC | 80709600 80709610 |
| 0B22 0 0002 | DC | /0002 | LINE 0 - FORM 2 | | 80709620 |
| 0823 1 C400 0813 | | L TERMES | BYPASS CK IF ON LINE | | 80709630 |
| 0825 1 4C20 0B06 | | L RDT30-1,Z | 511 NO 511 21 511 21112 | | 80709640 |
| 0827 0 C208 | LD | 2 8 | GET SENSE WD | | 80709650 |
| OB28 O EOAB | AND | RDTXB | CK WLR OR DIAG | | 80709660 |
| 0829 1 4C18 0B2D | | L RDT20,&- | SKIP # NO RETRY | | 80709670 |
| 0B2B 1 7401 0AD7 | | L RDT8A,1 | INCR ERROR SW | | 80709680 |
| 0B2D 0 70BE | RDT20 MDX | RDCKR | GD CK HDR | | 80709690 |
| 0B2E 0 C215 | RDT37 LD | 2 21 | GET ERROR CONTROL | | 80709700 |
| 0B2F 0 E0A6 0B30 0 9341 | AND S | RDTY0 3 65 | SAVE REREAD CT SUB 9 | | 80709710 |
| 0B31 0 4818 | BS C | \$ - | IS READ CT # 9 | | 80709720 80709730 |
| 0B32 0 7005 | MDX | RDT15 | YES-GO PASS CLEANER | | 80709740 |
| | * | | ves do rass decanten | | 80709750 |
| 0833 0 C215 | LD | 2 21 | GET ERROR CONTROL | | 80709760 |
| 0834 0 8124 | A | 1 36 | ADD 1 | | 80709770 |
| 0B35 0 D215 | STO | 2 21 | SAVE | | 80709780 |
| 0B36 0 430E | BSI | 3 14 | GO BACKSPACE | SRC | 80709790 |
| 0B37 0 7096 | MDX | RDT1 | GO RETRY | | 80709800 |
| | * | | | | 80709810 |
| | * | REREAD | CT WAS 9 | | 80709820 |
| 2022 2 5215 | * | | 057 5 67-1 | | 80709830 |
| 0B38 0 C215 | RDT15 LD | 2 21 | GET ERROR CTRL | | 80709840 |
| 0839 0 1808 083A 0 9341 | SRA S | 8 3 65 | SUB 9 | | 80709850 |
| 0B3B 1 4C18 0B5C | | L RDT18,&- | BRANCH # CLEAN CT#10 | | 80709860 |
| 0B3D 0 8340 | A | 3 64 | ADD TEN | | 80709870 80709880 |
| 0B3E 0 1008 | SLA | 8 | ADD TEN | | 80709890 |
| 0B3F 0 D215 | STO | 2 21 | SAVE | | 80709900 |
| | * | | | | 80709910 |
| | * | BACKSF | PACE PAST CLEANER | | 80709920 |
| | * | | | | 80709930 |
| 0840 0 6305 | LDX | 3 5 | | | 80709940 |
| 0841 0 6807 | RDT16 STX | 3 RDTXC&1 | SAVE IX 3 | | 80709950 |
| 0B42 0 412E | BSI | 1 46 | SET IX 3 | SRC | 80709960 |
| 0843 0 C20A 0844 0 912 4 | LD S | 2 10 1 36 | GET REC CT SUB ONE | | 80709970 |
| 0B45 1 4C18 0B63 | | L RDT22,&- | IS TAPE AT 1ST REC | | 80709980 80709990 |
| 0847 0 430E | BSI | 3 14 | GO BACKSPACE | SRC | 80710000 |
| 0848 0 6700 0000 | | L3 0 | RESTORE IX 3 | 3.00 | 80710010 |
| 0B4A 0 73FF | MDX | 3 -1 | DECR IX 3 | | 80710020 |
| 0B4B 0 70F5 | MDX | RDT16 | LOOP | | 80710030 |
| | * | | | | 80710040 |
| | * | | D IS PAST CLEANER | | 80710050 |
| | * | REPOS | ITION TO REC DESIRED | | 80710060 |
| 08/6 0 /305 | * | 2 6 | | | 80710070 |
| 084C 0 6305 084D 0 680A | LDX RDT17 STX | 3 5 3 RDT7A&1 | SAVE IX 3 | | 80710080 |
| 084E 0 C124 | LD | 1 36 | GET ONE | | 80710090 80710100 |
| 084F 0 D107 | STO | 1 7 | SET RETRY SW | | 80710110 |
| 0B50 0 73FF | MDX | 3 -1 | DECR IX 3 | | 80710120 |
| 0B51 0 7002 | M DX | RDT 04 | GO SKIP 1 REC | | 80710130 |
| 0852 0 1010 | SLA | 16 | | | 80710140 |
| 0853 0 D107 | STO | 1 7 | CLEAR RETRY SW | | 80710150 |
| 0854 0 412E | RDT04 BSI | 1 46 | SET IX 3 | SRC | 80710160 |
| 0B55 1 4C00 OACE | BSC | L RDT1 | GO RETRY | | 80710170 |
| 0B57 0 6700 0000 | | L3 0 | RESTORE IX 3 | | 80710180 |
| 0859 0 73FF | MDX | 3 -1 | | | 80710190 |
| 0B5A 0 70F2 | MDX | RDT17 | | | 80710200 |
| 0B5B 0 70F1 | MDX | RDT17 | | | 80710210 |
| | | | | | |

| | * | UNCORRECTABLE ERROR | 80710220 80710230 |
|------------------|-----------|---|----------------------|
| | * | | 80710240 |
| 0B5C 0 C212 | RDT18 LD | 2 18 GET UNRECOV RD CT | 80710250 |
| 0B5D 0 8124 | A | 1 36 ADD ONE | _ |
| 0B5E 0 D212 | ŠTD | - | 80710260 |
| | | | 80710270 |
| 085F 0 430B | 881 | | 80710280 |
| 0B60 0 E004 | DC | /E004 ID 04 | 80710290 |
| 0B61 0 0002 | DC | /0002 LINE 0 - FORM 2 | 80710300 |
| 0B62 0 70AD | MDX | RDT19 CDNTINUE | 80710310 |
| | * | | 80710320 |
| | * | TAPE REACHED LOAD POINT- | 80710330 |
| | * | DID NOT PASS CLEANER | 80710340 |
| | * | | 80710350 |
| 0B63 0 4308 | RDT22 BSI | 3 8 GO TD PRINT VIA MLG SRC | 80710360 |
| 0B64 0 A005 | DC | /A005 ID 05 | 80710370 |
| 0865 0 0003 | DC | /0003 LINE 0 - FORM 3 | 80710380 |
| | * | , and a round | 80710380 |
| 0B66 0 C348 | LD | 3 72 GET 0005 | 80710400 |
| 0B67 0 90E1 | S | RDTXC&1 SUB PRESENT LOC | |
| 0B68 0 D0E0 | STO | | 80710410 |
| 0B69 1 6780 0B49 | | | 80710420 |
| | FDX | | 80710430 |
| 0B6B 0 70E1 | MDX | RDT17 GO RESTORE TAPE | 80710440 |
| | | *** *** *** *** *** *** *** | 80710450 |
| | * | | 80710460 |
| | * | THIS IS THE BACKSPACE RTN | 80710470 |
| | * | • | 80710480 |
| | * *** *** | *** *** *** *** *** *** *** *** | 80710490 |
| OB6C O C30E | BSPE LD | 3 14 GET RETURN SE | 80710500 |
| OB6D O D108 | STO | | 80710510 |
| OB6E 0 4326 | BSP02 BSI | 3 38 GO CK DR FOR BUSY SRC | 80710520 |
| 0B6F 0 C109 | BSPO6 LD | 1 9 GET FNC & MOD | 80710530 |
| 0B70 0 4349 | BSI | | 80710540 |
| 55,000,000, | * | 3 13 00 361 01413306 CHD 3KC | |
| | * | BACKSPACE COMPLETED | 80710550 |
| | * | DACKSPACE COMPLETED | 80710560 |
| 0B71 0 C20A | BSPI2 LD | 2 10 CCT pcc CT | 80710570 |
| · | | 2 10 GET REC CT | 80710580 |
| 0B72 1 4C18 0B76 | BZ | *+2 SKIP SUBT. IF ALRDY ZERO \$ | |
| 0B74 0 9124 | S | 1 36 SUB ONE | 80710600 |
| 0B75 0 D20A | STO | | 80710610 |
| 0876 0 4351 | BSI | 3 81 GO RELEASE DEVICE SRC | 80710620 |
| 0B77 0 4D80 0008 | BSP05 BSC | II 8 EXIT SX | 80710630 |
| | * *** *** | *** *** *** *** *** *** *** | 80710640 |
| | * | | 80710650 |
| | * | THIS IS THE REWIND ROUTINE | 80710660 |
| | * | | 80710670 |
| | * *** *** | *** *** *** *** *** *** *** *** | 80710680 |
| OB79 O C311 | RWDE LD | 3 17 GET RETURN SE | 80710690 |
| OB7A O D10A | STO | | 80710700 |
| | * | | 80710710 |
| | * | CK FOR LD PT | 80710720 |
| | * | | 80710720 |
| 0B7B 0 4329 | RWD04 BSI | 3 41 GO CK FOR AVAIL SRC | |
| 0B7C 0 4326 | BSI | | 80710740 |
| 0B7D 0 4320 | BSI | 3.0 | 80710750 |
| 0B7E 0 100C | | 3 32 GO SENSE DEVICE SRC | 80710760 |
| | SLA | | 80710770 |
| 0B7F 0 4828 | BSC | &Z IS DR AT LD PT | 80710780 |
| 0B80 0 7011 | MDX | RWDI1 YES | 8071 0790 |
| | * | | 80710800 |
| | * | OK TO REWIND | 80710810 |
| | * | | 80710820 |
| 0B81 0 C20E | LD | 2 14 GET REWIND COUNT | 80710830 |
| OB82 O 8124 | A | 1 36 ADD 1 | 80710840 |
| 0B83 0 D20E | STO | | 80710850 |
| 0B84 0 C10B | LD | 1 11 GET FNC & MOD | 80710860 |
| 0B85 0 D202 | STO | - · · · · · · · · · · · · · · · · · · · | |
| 0886 0 D203 | STO | | 80710870 |
| 0B87 0 F201 | EOR | | 80710880 |
| -30. 0 1201 | EUR | 2 1 SET AREA CODE | 80710890 |
| | | | |

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DATE

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PROG ID 0807-1

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2400 FUNCTION TEST

28FEB66 01JUL66 15MAY67 14N0V69 30JAN70 415120 415178 411731 431319 431319A

EC NO.

415120

PART NO. 2196370

18M MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2400 FUNCTION TEST

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| 0B88 0 0305 | STO 3 5 SET IOCC | 80710900 | | * | 80711600 |
|--|---|--|-----------------------------|--|--|
| 0B8 9 0 7 017 | MOX COM3F GO ISSUE CDMMANO | 80710910 | OBB7 O 412E | BSI 1 46 SET IX 3 SRC | 80711610 |
| 0B8A 0 4351 | RWDIR BSI 3 81 GO RELEASE SRC | 80710920 | 0BB8 0 CO02 | DSWD LO DSWXO GET SENSE WO | 80711520 |
| 088B 0 4320 | RWOIZ BSI 3 32 GO SENSE DEVICE SRC | 80710930 | 0BB9 C 4080 000C | | |
| 088C 0 100C | 30 02.102 02.122 | | 0009 (4080 0000 | BSC II 12 EXIT SX | 80711630 |
| | SLA 12 | 80710940 | | * | 80711640 |
| OB8D 0 4828 | BSC &Z 1S DR AT LD PT | 80710950 | | * CONSTANTS | 80711650 |
| 0B8E 0 7003 | MDX RWDI1 YES | 80710960 | | * | 80711660 |
| 0B8F 0 4323 | 8SI 3 35 SET MLSCF ENTRY SRC | 80710970 | OBBB 0 0000 | DSWXO DC O SECOND SENSE STORAGE | 80711670 |
| 08 9 0 1 0 888 | DC RW012 | 80710980 | OBBC 0 0000 | DC 0 FIRST SENSE STORAGE | 80711680 |
| | ********* | 80710990 | 0220 0 000 | * *** *** *** *** *** *** *** *** *** | |
| 0B 9 1 0 4338 | | | | | 80711690 |
| 0071 0 4336 | | 8071100C | | Ť | 80711700 |
| | ************* | 80711010 | | * RDUTINE TO SET MLSCF ENTRY | 80711710 |
| | * | 80711020 | | * | 80711720 |
| | * DRIVE AT REC 1 OR LOAD PT | 80711030 | | * *** *** *** *** *** *** *** *** *** | 80711730 |
| | * | 80711040 | OBBO 0 C780 Q023 | STPSE LO 13 35 GET ADRS TO SET SE | 80711740 |
| 0B92 0 4326 | RWDI1 BSI 3 38 CK FOR BUSY SRC | 80711050 | 0B8F 0 D10F | STO 1 15 SAVE | |
| 0B93 0 C124 | | | | | 80711750 |
| | | 80711060 | 0BC 0 1 6700 080C | LDX L3 MLSCF&3 IX 3 # ADRS ML MLSCF | 90711760 |
| 0894 0 D20A | STO 2 10 SET REC CT # 1 | 80711070 | OBC2 O C300 | LD 30 GET FIRST ENTRY | 80711770 |
| 0B95 0 4329 | 8SI 3 41 GO CK FDR AVAIL SRC | 8071108C | OBC3 O 4820 | BSC Z IS IT ZERO | 8071178C |
| 0B96 0 4080 000A | BSC II 10 EXIT SX | 80711090 | OBC4 O 7CO2 | MDX STPS2 NO | 80711790 |
| | * *** *** *** *** *** *** *** *** *** | 80711100 | 0BC5 0 C301 | LO 3 1 GET SECOND ENTRY | 80711800 |
| | * | 80711110 | OBC6 C D300 | STO 3 0 SET IN FIRST | |
| | COMMON DOUTTHE TO CET UP | | | | 80711810 |
| | * COMMON ROUTINE TO SET UP | 80711120 | OBC 7 0 C110 | STPS2 LD 1 16 GET NEW ENTRY | 80711820 |
| | * IOCC, SET WD CT, SAVE THE | 80711130 | OBC8 O D301 | STO 3 1 SET IN SECOND ENTRY | 89711830 |
| | * ORIVE SELECTION AND ISSUE | 80711140 | OBC9 0 412E | BSI 1 46 SET IX 3 SRC | 80711840 |
| | * THE COMMANO | 9071115C | OBCA 0 C323 | LO 3 35 GET RETURN | 80711850 |
| | * | 80711160 | OBCB 0 8124 | A 1 36 ADO ONE | 80711860 |
| | * *** *** *** *** *** *** *** *** *** | 80711170 | 0BCC 0 D001 | | |
| 0898 0 D202 | | | | | 80711870 |
| | | 80711190 | 0BC0 0 4C00 0000 | STPS6 BSC L O EXIT SX | 80711890 |
| 0899 0 0203 | STO 23 SET MOD IN DST | 80711190 | | * | 80711890 |
| 0B9A 0 F201 | EOR 21 SET AREA CODE | 80711200 | | * MONITOR RETURNS | 80711900 |
| 0898 0 0305 | STO 3.5 SET LOCC | 8071121C | | * | 80711910 |
| 0B9C 0 C20F | LO 2 15 GET WO CT | 80711220 | OBCF 0 404C | SETXO BSI SETX4 SET IXING TO DR O SRC | |
| 0B9D 0 F347 | EOR 3 71 SET NO EOT INTRPT | | 0800 0 4080 000F | | 80711920 |
| 0B9E 0 D350 | | 80711230 | 0000 0 4000 0000 | SETX3 BSC 11 15 GD TO PROPER ADRS | 80711930 |
| | STO 3 93 SET IN 1/O AREA | 80711240 | | * | 80711940 |
| 089F 0 C20A | LO 2 10 GET RECORO CT | 80711250 | OBO2 0 4051 | SETX1 BSI SETX5 SET IXING TO DR 1 SRC | 80711950 |
| OBAO O 035E | STD 3 94 SET IN I/O AREA & 1 | 80711280 | OBD3 O 7CFC | MOX SETX3 | 80711960 |
| OBA1 0 C124 | COM3F LD 1 36 GET ONE | 80711290 | | * *** *** *** *** *** *** *** *** *** | 80711970 |
| OBA2 O D21A | STO 2 26 SET IN OR BUSY SW | 80711300 | | * | |
| OB A 3 O 4354 | | | | I | 80711980 |
| | 3.00 | 80711310 | | * ROUTINE TO SET INTRUPT | 80711990 |
| 0BA4 0 0B04 | XIO 3 4 ISSUE COMMANO | 80711320 | | * MLSCF ENTRY | 80712000 |
| OBA5 0 4326 | BSI 3 38 CK FOR BUSY SRC | 80711330 | | * | 80712010 |
| | ************* | 80711340 | | * *** *** *** *** *** *** *** *** *** | 80712020 |
| OBA6 O 4338 | BSI 3 56 GO TO DIAG MDN START*SX | 80711350 | 0B04 0 C780 0057 | STIRE LO 13 87 GET AORS TO SET SE | 80712030 |
| | ********** | 80711360 | 0B06 0 D111 | STO 1 17 SAVE RETURN | |
| | * *** *** *** *** *** *** *** *** *** *** | | OBD7 1 67CO 080A | | 80712040 |
| | • | 80711370 | _ | LDX L3 MLSCF&1 IX 3 # ADR INT MLSCF | 80712050 |
| | | 80711380 | 08 09 0 C300 | STIR3 LO 3 O GET AN ENTRY | 80712060 |
| | * THIS IS THE SENSE DEVICE | 80711390 | OBOA C 4820 | BSC Z IS IT ZERO | 80712070 |
| | * ROUTINE | 80711400 | 0B 0B 0 700 2 | MOX STIRO NO | 80712080 |
| | * | 80711410 | 08 0 C 0 C301 | STIR1 LD 3 1 GET NEXT ENTRY | 80712090 |
| | * *** *** *** *** *** *** *** *** *** *** | 80711420 | OBDD 0 0300 | STO 3 0 PUSH ENTRY UP | 80712100 |
| 0BA7 0 C320 | DSWEN LO 3 32 GET RETURN SE | 80711430 | V | ± | |
| OBA8 O D10C | STO 1 12 SAVE RETURN | | | * SET NEW CNITOV | 80712110 |
| JUNO O DIOC | 210 TIS SAAE KELOKU | 80711440 | | * SET NEW ENTRY | 80712120 |
| | * * * * * * * * * * * * * * * * * * * | 80711450 | | ∓ | 80712130 |
| | * 8UILO IOCC | 80711460 | OBOE O C112 | STIRO LO 1 18 GET NEW ENTRY | 80712140 |
| | * | 80711470 | OBDF 0 0301 | STO 3 1 SET AT BOTTOM | 80712150 |
| 08A9 0 C100 | OSWB LD 1 13 GET FNC & MOD | 80711480 | 0BEO 1 4COO 0856 | STIR6 BSC L MTIREI EXIT SX | 80712160 |
| 0BAA 0 F201 | EOR 2 1 SET AREA COOE | 80711490 | | * 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | |
| 0BAB 0 0307 | STO 3 7 SET IOCC | 80711500 | | * MONITOD DETIONS | 80712170 |
| 0BAC 0 6302 | | | | * MONITOR RETURNS | 80712190 |
| | OSW13 LOX 3 2 SET FOR ODUBLE SENSE OSWO XIO L IOCC3 ISSUE SENSE | 80711510 | 0053 0 (000 | CCT-0.000 | 80712190 |
| 08AO 1 0C00 097A | | 80711520 | OBE2 0 4039 | SETIO BSI SETX4 SET IXING TO OR O SRC | 80712200 |
| | *·· | 80711530 | OBE3 0 40B0 0011 | SETI3 BSC II 17 GO TO PROPER ADRS | 80712210 |
| OBAF 1 0700 OBBA | STO L3 OSWXO-1 SAVE SENSE WORDS | 00.11730 | | * | 9071222C |
| | *·· | 80711540 | | | |
| OBAF 1 0700 OBBA OBB1 0 73FF | STO L3 OSWXO-1 SAVE SENSE WORDS MOX 3-1 OECR IX 3 | 80711540 | 0BE5 0 403E | SETTLE BST SET X5 SET TYTHS TO 62 1 SOC | |
| OBAF 1 0700 OBBA OBB1 0 73FF OBB2 0 70FA | STO L3 OSWXO-1 SAVE SENSE WORDS MOX 3-1 OECR IX 3 MOX OSWO LOOP | 80711540 80711550 | 08E5 0 403E 08E6 0 70EC | SETIL BSI SETX5 SET IXING TO OR 1 SRC | 80712230 |
| OBAF 1 0700 OBBA OBB1 0 73FF OBB2 0 70FA O8B3 0 COOB | STO L3 OSWXO-1 SAVE SENSE WORDS MOX 3-1 OECR IX 3 MOX OSWO LOOP OSW11 LO OSWXO&1 GET FIRST SENSE WORO | 80711540 80711550 80711560 | 0BE5 0 403E 0BE6 0 70FC | MOX SETI3 | 80712230 80712240 |
| OBAF 1 0700 OBBA OBB1 0 73FF OBB2 0 70FA O8B3 0 COOB OBB4 0 FOO6 | STO L3 OSWXO-1 SAVE SENSE WORDS MOX 3-1 OECR IX 3 MOX OSWO LOOP OSW11 LO OSWXO&1 GET FIRST SENSE WORO EOR OSWXO COMPARE WITH SECOND | 80711540 80711550 80711560 80711570 | _ | MOX SETI3 * *** *** *** *** *** *** *** *** *** | 80712230 80712240 80712250 |
| OBAF 1 0700 OBBA OBB1 0 73FF OBB2 0 70FA 08B3 0 C00B OBB4 0 F006 OBB5 0 4B20 | STO L3 OSWXO-1 SAVE SENSE WORDS MOX 3-1 OECR IX 3 MOX OSWO LOOP OSW11 LO OSWXO&1 GET FIRST SENSE WORO EDR OSWXO COMPARE WITH SECOND 8SC Z IS ORIVE FULLY SELEC | 80711540 80711550 80711560 80711570 80711580 | _ | MOX SETI3 * *** *** *** *** *** *** *** *** *** | 80712230 80712240 |
| OBAF 1 0700 OBBA OBB1 0 73FF OBB2 0 70FA O8B3 0 COOB OBB4 0 FOO6 | STO L3 OSWXO-1 SAVE SENSE WORDS MOX 3-1 OECR IX 3 MOX OSWO LOOP OSW11 LO OSWXO&1 GET FIRST SENSE WORO EOR OSWXO COMPARE WITH SECOND | 80711540 80711550 80711560 80711570 | _ | MOX SETI3 * *** *** *** *** *** *** *** *** *** | 80712230 80712240 80712250 |
| OBAF 1 0700 OBBA OBB1 0 73FF OBB2 0 70FA 08B3 0 C00B OBB4 0 F006 OBB5 0 4B20 | STO L3 OSWXO-1 SAVE SENSE WORDS MOX 3-1 OECR IX 3 MOX OSWO LOOP OSW11 LO OSWXO&1 GET FIRST SENSE WORO EDR OSWXO COMPARE WITH SECOND 8SC Z IS ORIVE FULLY SELEC | 80711540 80711550 80711560 80711570 80711580 | _ | MOX SETI3 * *** *** *** *** *** *** *** *** *** | 80712230 80712240 80712250 80712260 |
| OBAF 1 0700 OBBA OBB1 0 73FF OBB2 0 70FA 08B3 0 C00B OBB4 0 F006 OBB5 0 4B20 | STO L3 OSWXO-1 SAVE SENSE WORDS MOX 3-1 OECR IX 3 MOX OSWO LOOP OSW11 LO OSWXO&1 GET FIRST SENSE WORO EDR OSWXO COMPARE WITH SECOND 8SC Z IS ORIVE FULLY SELEC | 80711540 80711550 80711560 80711570 80711580 | _ | MOX SETI3 * *** *** *** *** *** *** *** *** *** | 80712230 80712240 80712250 80712260 |
| OBAF 1 0700 OBBA OBB1 0 73FF OBB2 0 70FA 08B3 0 C00B OBB4 0 F006 OBB5 0 4B20 | STO L3 OSWXO-1 SAVE SENSE WORDS MOX 3-1 OECR IX 3 MOX OSWO LOOP OSW11 LO OSWXO&1 GET FIRST SENSE WORO EDR OSWXO COMPARE WITH SECOND 8SC Z IS ORIVE FULLY SELEC | 80711540 80711550 80711560 80711570 80711580 | _ | MOX SETI3 * *** *** *** *** *** *** *** *** *** | 80712230 80712240 80712250 80712260 |

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PROG ID 0807-1

2400 FUNCTION TEST

DATE

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2400 FUNCTION TEST

| | * | | | | 80712280 | |
|--------------------|-------------|---------------|----------------------|------|----------------------|--------|
| | * *** *** * | ** *** *** ** | * *** *** *** *** | * | 80712290 | |
| OBE7 0 C326 | CKBSE LD | 3 38 | GET RETURN | SE | 80712300 | |
| OBE8 0 D113 | STO | 1 19 | SAVE | • • | 80712310 | |
| OBE9 1 7400 0953 | BSY03 MDX | L DST0&26.0 | IS DR O BUSY | | 80712320 | |
| OBEB 0 700D | MDX | B SYO 1 | YES | | 80712330 | |
| OBEC 0 1010 | SL A | 16 | ZERO ACCUM | | 80712340 | |
| OBED 0 D028 | STO | BSYX2 | CLEAR BUSY COUNT | | 80712350 | |
| OBEE 1 7400 0970 | BSY04 MDX | L DST1&26.0 | IS DR 1 BUSY | | 80712360 | |
| OBFO 0 7013 | MDX | B S Y 0 5 | YES | | 80712370 | |
| OBF1 0 1010 | SLA | 16 | ZERO ACCUM | | 80712380 | |
| 0BF2 0 D024 | STO | BSYX3 | CLEAR BUSY COUNT | | 80712390 | |
| OBF3 0 4320 | BSI | 3 32 | SENSE DR TO SELECT | SRC | 80712400 | |
| OBF4 0 1801 | SRA | 1 | | | 80712410 | |
| OBF5 1 4CO4 OCOO | | L 8SY02,E | BRANCH # DR 8USY | | 80712420 | |
| OBF7 0 4080 0013 | | I1 19 | EXIT | SX | 80712430 | |
| | * | | | | 80712440 | |
| | * | ORIVE | O IS BUSY | | 80712450 | |
| | * | | | | 80712460 | |
| OBF9 1 740A OC16 | BSY01 MDX | | IS DR BUSY TOO LONG | | 80712470 | |
| OBFB 0 7004 | MOX | B \$Y02 | NO | | 80712480 | |
| | * | | | | 80712490 | |
| | * | | | | 80712500 | |
| OBFC 0 1010 | SLA | 16 | | | 80712510 | |
| 0BFD 0 D018 | STO | BSYX2 | ZERO BUSY COUNT | | 80712520 | |
| OBFE 0 4010 | BSI | SETX4 | SET IXING DR 0 | SRC | 80712530 | |
| OBFF 0 700A | MOX | BSY08 | GO PRINT | | 80712540 | |
| 0C00 0 C120 | BSY02 LD | 1 45 | GET LOST INT VECT | | 80712550 | |
| 0C01 1 D400 0809 | | L MLSCF | SET | | 80712560 | |
| 0003 0 4330 | | | ********** | | 80712570 | |
| 0003 0 4338 | BSY07 BSI | 3 56 | GO TO OIAG MON-START | | 80712580 | |
| | * | **** | ****** | * | 80712590 | |
| | * | ODTVC | 1 TE DUEY | | 80712600 | |
| | * | UKIVE | 1 IS BUSY | | 80712610 | |
| 0C04 1 740A 0C17 | BSY05 MOX | 1 DCVV2 10 | TE DO DUEY TOO LONG | | 80712620 | |
| 0C06 0 70F9 | MOX | • | IS DR BUSY TOO LONG | | 80712630 | |
| 0000 0 1019 | * | B SY02 | NO | | 80712640 | |
| | * | | | | 80712650 | |
| 0007 0 1010 | SLA | 16 | | | 80712660 80712670 | |
| 0C08 0 D00E | STO | B SYX3 | ZERO BUSY COUNT | | 80712680 | |
| 0C09 0 401A | BSI | SETX5 | SET IXING DR 1 | | 80712690 | |
| 0007 0 1012 | * | JEINS | SET TATHO DR T | | 80712700 | |
| OCOA O 430B | BSY08 BSI | 3 11 | GO TO PRINT VIA MER | SRC | 80712710 | |
| OCOB O EOO6 | OC | /E006 | 10 06 | 31.0 | 80712720 | |
| QCQC 0 0009 | oc oc | /0009 | LINE O FORM 9 | | 80712730 | |
| 0000 0 C100 | ĹŌ | 1 13 | GET SENSE FNC | | 80712740 | |
| OCOE O F201 | EOR | 2 1 | SET AREA CODE | | 80712750 | |
| OCOF 0 0307 | STO | 3 7 | STORE | | 80712760 | |
| OC10 0 OB06 | XIO | 3 6 | SENSE NON-RESETABLE | | 80712770 | |
| OC11 O C307 | LO | 3 7 | GET IOCC | | 80712780 | |
| 0C12 0 F124 | EOR | 1 36 | SET BIT 15 | | 80712790 | |
| 0013 0 0307 | STO | 3 7 | SAVE | | 80712800 | |
| OC14 O OB06 | XIO | 3 6 | SENSE-RESETABLE | | 80712810 | |
| 0C15 0 434C | BSI | 3 76 | GO TO RTN EXIT | | 80712820 | |
| | * | | | | 80712830 | |
| · | * | CONST | ANT S | | 80712840 | |
| | * | | | | 80712850 | |
| OC16 O 0000 | BSYX2 DC | 0 | DR O BUSY CT | | 80712860 | |
| 0017 0 0000 | BSYX3 OC | 0 | DR 1 BUSY CT | | 80712870 | |
| OC18 0 4003 | LIVO BSI | SET X4 | SET IXING TO OR O | SRC | 80712880 | |
| 0C19 0 70CF | MOX | BSY03 | | | 80712890 | |
| OC1A 0 4009 | LIV1 BSI | SETX5 | SET IXING TO OR 1 | SRC | 80712900 | |
| 0C1B 0 70C0 | MDX | BSY03 | | | 80712910 | |
| | | ** *** *** ** | * *** *** *** *** | * | 80712920 | |
| | * | | | | 80712930 | |
| | * | ROUTI | NE TO SET INDEXING | | 80712940 | |
| | * | TO DR | IVE O VALUES | | 80712950 | |
| | | | | | | |
| | | | | | | |
| 2055044 01 1111 44 | 15MAY67 | 1400740 303 | A N.7.0 | | 0000 10 | 0007 |
| 28FEB66 01JUL66 | I O MATO (| 14NOV69 30J | AN70 | | PROG IO | 0807-1 |
| 415120 415178 | 411731 | | 319A | | PAGE | 10 |

| 0000 5500 08D6 6600 0939 112E 100000 100000 100000 100000 100000 10000 10000 10000 10000 | * *** SETX4 * *** * * * * * * * * * * * | DC LDX LDX BSI BSC *** | L2 1 1 *** | 0 DROT8 DST0 46 SETX4 *** *** | *** *** *** *** *** SET IX 3 EXIT *** *** *** *** *** PTINE TO SET INDEXING DRIVE 1 VALUES | SE SRC SX | 80712960 80712970 80712980 80712990 80713010 80713010 80713020 80713040 80713040 |
|--|--|---|---|--|---|-----------------|--|
| 0000 5500 08D6 6600 0939 112E 112E 112E 112E 112E 112E | * *** * *** * * * * | DC LDX LDX BSI BSC *** | L1 L2 1 I *** | 0 DROT8 DST0 46 SETX4 *** *** | SET IX 3 EXIT *** *** *** *** *** ITINE TO SET INDEXING | SE SRC | 80712980 80712990 80713000 80713010 80713020 80713030 80713050 |
| 0000 5500 08D6 6600 0939 112E 112E 112E 112E 112E 112E | * *** | LDX BSI BSC *** DC. | L2 1 1 *** | DROT8 DSTO 46 SETX4 *** *** | EXIT *** *** *** *** *** ITINE TO SET INDEXING | SRC | 80712990 80713000 80713010 80713020 80713030 80713040 80713050 |
| 0000 5500 612E 0000 0000 0000 0000 0000 0000 0000 0 | * * * * * | LDX BSI BSC *** DC. | L2 1 1 *** | DSTO 46 SETX4 *** *** ROU TO | EXIT *** *** *** *** *** ITINE TO SET INDEXING | | 80713000 80713010 80713020 80713030 80713040 80713050 |
| 0000 5500 0909 6400 0956 | * * * * * | BSI BSC *** DC . | 1 I *** | 46 SETX4 *** *** ROU TO | EXIT *** *** *** *** *** ITINE TO SET INDEXING | | 80713010 80713020 80713030 80713040 80713050 |
| 0000 5500 0909 6600 0956 | * * * * * | #** DC . | I *** | SETX4 *** *** ROU TO | EXIT *** *** *** *** *** ITINE TO SET INDEXING | | 80713020 80713030 80713040 80713050 |
| 0000 5500 0909 6600 0956 12E | * * * * * | *** DC . | *** | *** *** ROU TO | *** *** *** *** *** *** TINE TO SET INDEXING | SX * | 80713030 80713040 80713050 |
| 5500 0909 6600 0956 112E | * * * * * | *** DC . | | ROU To | TINE TO SET INDEXING | · * | 80713040 80713050 |
| 5500 0909 6600 0956 112E | * * * *** | DC . | *** | TO | | | 80713050 |
| 5500 0909 6600 0956 112E | * * * *** | DC . | *** | TO | | | |
| 5500 0909 6600 0956 112E | * * * *** SETX5 | DC . | *** | | DRIVE 1 VALUES | | 00712010 |
| 5500 0909 6600 0956 112E | * * *** SETX5 | DC . | *** | *** *** | | | 80713060 |
| 5500 0909 6600 0956 112E | SETX5 | DC . | *** | | | | 80713070 |
| 5500 0909 6600 0956 112E | SELXS | - | | | *** *** *** *** *** | - | 80713080 |
| 6600 0956 12E | | LUX | | 0 | | SE | 80713090 |
| +12E | | 104 | | DRITB | | | 80713100 |
| | | LDX | | DSTI | CC- *V 3 | •-• | 80713110 |
| 1080 0024 | | BSI BSC | 1 | 46 CETYE | SET IX 3 | SRC | 80713120 |
| | | *** | *** | SETX5 *** *** | EXIT *** *** *** *** | SX | 80713130 |
| | * *** | *** | *** | *** *** | *** *** *** *** *** | • | 80713140 |
| | * | | | 201 | TIME TO CH AMAZIANIE | | 80713150 |
| | * | | | KUU | ITINE TO CK AVAILABLE | | 80713160 |
| | * ** | *** | *** | *** *** | *** *** *** *** *** | | 80713170 |
| 329 | CKAVE | . n | | | | | 80713180 |
| _ | OKAYE | | | | | 3 E | 80713190 |
| | AVI 02 | | | | | | 80713200 80713210 |
| | ~1202 | | - | | | | 80713210 |
| | | | 1 | | | | 80713230 |
| 7004 | | | _ | - | | | 80713240 |
| 1010 | | | | | | | 80713250 |
| 300C | | STO | | 7 | | | 80713260 |
| D80 0014 | | BSC | 11 | | | SX | 80713270 |
| | * | | | | | | 80713280 |
| 7401 OC42 | AVL 01 | MDX | L | AVLX1.1 | OR NOT AVAIL TOO LNO | ; | 80713290 |
| 7004 | | MDX | | AVL03 | NO | | 80713300 |
| ¥30B | | BSI | 3 | 11 | GO PRINT VIA MER | SRC | 80713310 |
| 005 | | OC | | /E005 | 10 05 | | 80713320 |
| 0000 | | OC | | /0000 | LINE O - FORM O | | 80713330 |
| +34C | | BS I | | | YES GO TO RTN EXIT | SRC | 80713340 |
| - | AVL03 | BSI | 3 | 35 | GO SET MLSCF ENTRY | SRC | 80713350 |
| DC2E | | OC | | AVL02 | | | 80713360 |
| | ***** | | | | | | 80713370 |
| +338 | | | _ | | | | 80713380 |
| | **** | **** | **** | ******* | ********** | ** | 80713390 |
| | Ŧ. | | | | | | 80713400 |
| | * | | | CON | ISTANI | | 80713410 |
| 2000 | AVIVI | 0.0 | | ^ | NOT AVIAL COUNT | | 80713420 |
| 7000 | | | *** | | | | 80713430 |
| | * | | | *** *** | *** *** *** *** *** | • | 80713440 |
| | * | | | COM | IDADE DOUTTNE | | 80713450 |
| | * | | | C U~ | PARE RUGITINE | | 80713460 |
| | * *** | *** | *** | *** *** | *** *** *** *** | | 80713470 |
| 20F | MRCDE | I D | 2 | 15 | GET WO CT | | 80713480 |
| | | | | | | | 80713490 80713500 |
| 0034 | | | - | | | | 80713510 |
| 0048 | | | | | 3.,, 2 | | 80713520 |
| 5301 | | LOX | 3 | | SET TO LINE/FORM | | 80713530 |
| 5B52 | | STX | | | SAVE | | 80713540 |
| 5938 | | STX | | | _ | | 80713550 |
| 94B | | STX | | | • | | 80713560 |
| C124 | | LO | | | GET ONE | | 80713570 |
| 0020 | | STO | | MRCXC | | | 80713580 |
| 580 0006 | MRC22 | LÐ | 11 | | GET FORMAT | | 80713590 |
| 0004 | | STO | | MRC24+1 | SET FORMAT | | 80713600 |
| 801 | | SRA | | 1 | | | 80713610 |
| 4C04 0C6F | _ | BSC | L | MRCO1,E | IS FORMAT # 2 | | 80713620 |
| 5 70 0 0000 | MRC24 | LOX | L3 | 0 | IX F FORMAT O OR 1 | | 80713630 |
| 0777104 77450440 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 010 000C D80 0014 401 0C42 004 30B 005 005 004 323 C2E 338 000 20F 400 0025 034 048 301 085 948 124 000 100 100 100 100 100 100 10 | 114 400 0954 AVL02 007 400 0971 0004 010 000C D80 0014 401 0C42 AVL01 004 30B 005 000 34C 323 AVL03 C2E ****** * 000 AVLX1 * * * * * * * * * * * * * * * * * * * | 1114 STO 400 0954 AVL02 MOX 0007 MOX 400 0971 MDX 0004 MOX 010 SLA 000C STO D80 0014 * 401 0C42 AVL01 MDX 30B BSI 005 OC 34C BSSI 323 AVL03 BSI C2E OC ********** * * * * * * * * * * * * * | 1114 | 329 | 329 | CKAVE LD |

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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2400 FUNCTION TEST

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PART NO. 2196370 PAGE 11 IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM
2400 FUNCTION TEST

PART NO. 2196370 PAGE 11A

PRDS ID

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114

| 0C56 1 C700 0E13 | LD L3 F04X2 | GET PATTERN ADRS | 80713640 | OC A 3 1 | C400 0802 | L D (| L SWO | GET SW FNC O | 80714320 |
|----------------------|--------------------|-----------------------|----------------------|----------|------------------------|--------------|--------------------|-----------------------|----------------------|
| 0C58 0 D009 | STD MRC10+1 | SET | 80713650 | 0CA5 0 | | SRA | 5 | 32. 3 | 80714330 |
| 0090 0 0009 | * | 561 | 80713660 | OCA6 0 | = | BSC | E | IS SW 10 DN | 80714340 |
| | * PDP | TIDN COMMON TO FORMAT | 80713670 | 0CA7 0 | | MDX | MRCOC | YES | 80714350 |
| | | O AND ONE | 80713680 | OCA8 1 | 4C80 0C89 | BSC 1 | | RETURN | 80714360 |
| | * | S AND CITE | 80713690 | | * | - • - | | | 80714370 |
| 0C59 0 63EE | MRC 03 LDX 3 -18 | IX 3 # NUMBER WDRDS | 8071370 | | * | | CDNS | TANT | 80714390 |
| 0C5A 0 61F7 | LDX 1 -9 | IX 1 # NUMBER PATT | 80713710 | | * | | | | 80714390 |
| 0C5B 1 74FF 0C90 | MDX L PATWD&1, | | 8071372 | OCAA O | 8001 MRCX5 | 5 DC | /8001 | LINE NOT O | 80714400 |
| 0C5D 1 4400 09E6 | MRCO1 BSI L INTIG | | SRC 8071373 | | | | | ** *** *** *** *** | 80714410 |
| 0C5F 1 7401 0C6E | MDX L MRCXC,1 | ADD 1 TD CK WD CT | 80713749 | | * | | | | 80714420 |
| 0C61 0 C500 0000 | MRC10 LD L1 0 | GET PATTERN WD | 8071375 | | * | | RDUT | INE TD SET UP FOR | 80714430 |
| 0C63 0 D216 | STD 2 22 | SET IN DST | 80713760 | | * | | PRIN | | 80714440 |
| 0C64 1 F700 09E5 | EDR L3 IDA&20 | CDMPARE WITH WD RD | 80713770 | | * | | | | 80714450 |
| 0C66 1 4420 0C89 | BSI L MRCO9,Z | BRANCH # ND CDMPARE | 80713780 | | * *** | * *** *1 | ** *** *** *: | ** *** *** *** *** | 80714460 |
| 0668 0 7101 | MDX 1 1 | DECR IX 1 | 80713790 | OCAB O | C308 MLGE | LÐ | 3 8 | GET RETURN SE | 90714470 |
| 0669 0 7001 | MDX MRCO2 | GD DECR IX 3 | 80713800 | OCAC O | D003 | STD | MERF | SAVE | 80714480 |
| OC6A O 61F7 | LDX 1 -9 | RELDAD IX 1 | 8071381 | OCAD O | C124 | LD | 1 36 | GET DNE | 80714490 |
| OC6B 0 7301 | MRCO2 MDX 3 1 | DECR IX 3 | 80713820 | OCAE O | D115 MLG03 | STD | 1 21 | SET IN LDG/ERRDR SW | 80714500 |
| 0C6C 0 70F0 | MDX MRC01 | LODP | 80713830 | OCAF O | 7005 | MDX | MER14 | GD TD CDMMDN PDRTIDN | 80714510 |
| OC6D 0 7012 | MDX MRC OC | GD EXIT | 80713840 | 0000 | | | 0 | RETURN STDRAGE | 80714520 |
| OC6E 0 0000 | MRCXC DC 0 | WD CT FDR CK | 80713850 | | | | | ** *** *** *** *** | 80714530 |
| | * | | 80713860 | OCB1 O | | | 3 11 | GET RETURN | 80714540 |
| | * FDR | MAT IS TWO | 8071387 | | | | | ** *** *** *** *** | 80714550 |
| | * | | 80713880 | OCB2 0 | | STD | MERF | SAVE | 80714560 |
| 0C6F 0 1010 | MRCD1 SLA 16 | ZERD ACCUM | 80713890 | OCB3 0 | | SLA | 16 | | 80714570 |
| 0C70 0 920F | S 2 15 | GET WD CT CDMPL | 8071390 | OC84 O | 70F9 | MDX | MLG03 | | 80714580 |
| OC71 0 8124 | A 1 36 | ADD 1 | 8071391 | | * | | | | 80714590 |
| 0C72 0 D001 | STD MRC05&1 | SAVE | 80713920 | | * | | C DMMI | DN PDRTIDN | 80714600 |
| 0073 0 6700 0000 | MRCO5 LDX L3 O | IX 3 # WD CT - 1 | 80713939 | | * | | | | 80714610 |
| 0C75 1 4400 09E6 | MRCO6 BSI L INTIG | | SRC 8071394 | OCB5 0 | | | 1 22 | GET MSG ADR | 80714620 |
| 0C77 1 7401 0C6E | MDX L MRCXC,1 | ADD 1 TD CK WD CT | 80713950 | 0CB6 0 | | STD | MERX3 | SAVE | 80714630 |
| 0 C7 9 0 C216 | LD 2 22 | GET PATTERN WD | 8071396 | OCB7 0 | | | 2 2B | GET RTN NUMBER | 80714640 |
| OC7A O F700 0000 | MRC23 EDR L3 0 | CDMPARE WITH DATA | 80713970 | | D400 0800 | | RID | SAVE | 80714650 |
| 0C7C 1 4420 0C89 | BSI L MRC09,Z | BRANCH # ND CDMPARE | 8071398 | _ | 6780 0800 | | I3 RID | IX 3 # RTN | 80714660 |
| OC7E 0 7301 | MDX 3 1 | DECR IX 3 | 80713990 | | C700 0A48 | | L3 MDNXB | GET ROUTINE ADRS | 80714670 |
| OC7F 0 70F5 | MDX MRC06 | LDDP | 8071400 | | D400 0801 | | RAD | SAVE | 80714680 |
| | * | | 8071401 | | 6780 OCE4 | | I3 MERX3 | IX 3 # MSG ADRS | 80714690 |
| | * ALL | WDRDS ARE CHECKED | 80714020 | | C480 OCB0 | | I MERF | GET MSG ID | 80714700 |
| | * | | 8071403 | 0004 0 | | | 3 2 | SET IN MSG | 80714710 |
| 0C80 1 6700 0974 | MRCOC LDX L3 MTTWD | IX3#ADRS CDMMDN T8L | 8071404 | | 7401 OCBO C480 OCBO | | _ MERF,1 I MERF | &1 TD RETURN | 80714720 |
| OC82 0 6500 0000 | MRTER LDX L1 0 | RESTDRE IX 1 | 8071405 | 0009 0 | | LD 1 STD | | GET LINE ND/FDRM NO | 80714730 |
| | * | 7500 ACCUM | 8071406 | | 7401 OCB0 | | MERX3 L MERF,1 | SAVE &1 TD RETURN | 80714740 |
| 0084 0 1010 | SLA 16 | ZERD ACCUM | 8071407 | | | LD | MERF | GET RETURN | 80714750 80714760 |
| 0C85 0 D400 0133 | STD L CKCR | CLEAR INT IGNDRE | 8071408 | 0 CD 0 | | | 1 23 | SAVE | 80714770 |
| 0C87 0 4F80 002C | BSC 13 44 | EXIT | | OCCE O | | LD | MERX3 | GET LINE/FDRM ND | 80714780 |
| | * | A DID NDT CDMPARE | 80714109 80714119 | OCCF O | | SRA | 8 | SAVE LINE | 80714790 |
| | + DAI | A DID NOT COMPARE | 8071412 | | | SLA | 8 | SAVE CINE | 80714800 |
| 0089 0 0000 | MRCO9 DC 0 | | 8071413 | | | | 3 0 | STDRE LINE IN MSG | 80714810 |
| 0C8A 1 4400 09E6 | BSI L INTIG | GD SET INT IGNDRE | SRC 8071414 | | * | • | | 375712 21712 177 7730 | 80714820 |
| 0C8C 1 7401 0AD7 | MDX L RDT8A,1 | INCR ERROR SW | 8071415 | | * | | CHECI | K FDRM | 80714830 |
| 008E 0 1000 | NOP | THON ENDOR 3# | 8071416 | | * | | J., LUI | | 80714840 |
| 0C8F 0 C700 0000 | PATHO LD L3 0 | GET WD IN ERRDR | 8071417 | 0CD2 0 | CO1 1 | LD | MERX3 | GET LINE/FDRM | 80714850 |
| 0C91 0 D217 | STD 2 23 | SAVE | 8071418 | 2222 | | SLA | 8 | SAVE FDRM | 80714860 |
| 0C92 0 690D | STX 1 MRTE1&1 | SAVE IX 1 | 8071419 | | 1808 | SRA | 8 | | 80714870 |
| 0C93 0 6B0E | STX 3 MRCOF&1 | SAVE IX 3 | 8071420 | | 800D | A | MER05 | ADD TBL ADR | 80714880 |
| 0C94 1 6700 0974 | LDX L3 MTTWD | IX 3#ADR CDMMDN T8L | 8071421 | | D001 | STD | MER11&1 | | 80714890 |
| 0096 0 6500 0000 | MRCOS LDX L1 0 | RESTDRE IX 1 | 8071422 | | 4C80 0000 MER 11 | BSC 1 | | | 80714900 |
| 0C98 0 C0D5 | LD MRCXC | GET WD CT FDR CK | 8071423 | | * | | | | 80714910 |
| 0C99 0 D20B | STD 2 11 | SET IN DST | 8071424 | | * | | FDRM | TABLE | 80714920 |
| 0C9A 0 4308 | BSI 3 11 | GD TD PRINT VIA MER | | | * | | | | 80714930 |
| 0C98 0 E007 | DC /E007 | ID 07 | 8071426 | OCD9 1 | | • DC | MERO3 | FDRM 0 | 80714940 |
| 0090 0 0001 | MRCOA DC /0001 | LINE O FDRM 1 | 8071427 | OCDA 1 | | DC | MER06 | 1 | 80714950 |
| OC 9D O COOC | LD MRC X5 | GET NDT LINE O | 8071428 | OCDB 1 | | DC | MERO7 | 2 | 80714960 |
| OC9E O DOFD | STD MRCOA | | 8071429 | OCDC 1 | | DC | M ER 08 | 3 | 80714970 |
| 0C9F 0 6500 0000 | MRTEL LDX LL 0 | RESTORE IX 1 | 8071430 | | | DC | MERO9 | 4 | 80714980 |
| OCA1 0 6700 0000 | MRCOF LDX L3 0 | RESTDRE IX 3 | 8071431 | OCDE 1 | UUZB | DC | MER12 | 5 | 80714990 |
| | | | | | | | | | |
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2400 FUNCTION TEST

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2400 FUNCTION TEST

| | • | | | | | | | | | | | |
|--------|---------------------------------|--------------------------|-----------------------------------|----------------------|--------|--------|---|-----------------|--------------|------------------------------------|-------------------------------|--------|
| ~ | OCDF 1 0D39 | DC MER 13 | 6 | 80715000 | i i | _ | | * | | | 80715680 | |
| | OCEO 1 0D39 | DC MER13 | 7 | 80715010 | 1 | | 0D17 0 C208 | MERO7 LD | 28 | GET DSW | 80715690 | |
| | OCE1 1 OD3E | OC MER17 | 8 | 80715020 | | | OD18 O D305 | STD | 3 5 | SET IN MSG | 80715700 | |
| _ | OCE2 1 OD47 | DC MER18 | 9 | 80715030 | | _ | 0D19 0 C20A | MER10 LD | 2 10 | GET REC CT | 80715710 | |
| | OCE3 1 OCD9 | MERO5 DC MERO4 | ADRS DF T8L | 80715040 | | | ODIA 0 9124 | S | 1 36 | SUB DNE | 80715720 80715730 | |
| | OCE4 0 0000 | MERX3 DC 0 | TEMP STDRAGE | 80715050 | | | 0D18 0 D304 | STD | 3 4 3 0 | SET IN MSG | 80715740 | |
| ~ | | * | | 80715060 | | - | 0D1C 0 C300 0D1D 0 F002 | MER16 LD EDR | MERX4 | SET WC | 80715750 | |
| | | * | FDRM IS O | 80715070 | | | 001E 0 D300 | STD | 3 0 | JET WC | 80715760 | |
| | OCE 0 C12/ | # MERO3 10 1 34 | CET OUE | 80715080 | | | 001F 0 70C8 | Mox | MERO1 | GD PRINT | 80715770 | |
| _ | 0CE5 0 C124 0CE6 0 F300 | MERO3 LD 1 36 EDR 3 0 | GET ONE Set | 80715090 | | | 0020 0 0003 | MERX4 DC | 3 | WD CT # 3 | 80715780 | |
| | OCE7 0 D300 | STD 3 0 | 361 | 80715100 80715110 | | | _ | * | | | 80715790 | |
| | OCE8 0 6806 | MERO1 STX 3 MERO2 | SET MSG ADRS IN CALL | 80715120 | | - | | * | FD | RM IS 3 | 80715800 | |
| • | OCE9 0 6818 | STX 3 MLG02 | שבו אשט אשווים זון טאבנ | 80715130 | | | | * | | | 80715810 | |
| • | OCEA 0 C115 | LD 1 21 | GET LDG/ERRDR SW | 80715140 | | | 0D21 0 C215 | MEROS LD | 2 21 | GET ERROR CTRL | 80715820 | |
| _ | OCEB 0 4820 | 8SC Z | SKIP # ERROR | 80715150 | | ** | 0D22 0 D305 | STD | 3 5 | SET IN MSG | 80715830 | |
| | OCEC 0 700D | MDX MLG01 | GD TD LDG | 80715160 | | | 0D23 0 70F5 | MOX | MER10 | SET WC | 80715840 80715850 | |
| | | ********* | | 80715170 | | | | * | FD | RM IS 4 | 80715860 | |
| _ | OCED 0 4480 0130 | MERY4 BSI I ERRDR | GD PRINT * | 80715180 | | | | * | 10 | NH 13 4 | 80715870 | |
| | OCEF 0 0000 | MERO2 DC 0 | ADR DF MSG * | 80715190 | | | 0024 1 C400 09D2 | MERO9 LD | L IDA&1 | GET REC ND READ | 80715880 | |
| | OCFO 1 OD4E OCF1 1 OD66 | DC MERYO DC MERLO | 8USY RETURN * LDDP DN ERRDR ADR * | 80715200 80715210 | | | 0D26 0 D305 | | 3 5 | SET IN MSG | 80715890 | |
| | OCFI I ODGG | | **************** | 80715220 | | _ | 0D27 0 70F1 | MDX | MER10 | GD CDMPLETE MSG | 80715900 | |
| | OCF2 0 412E | CLTER BSI 1 46 | SET IX 3 SRC | 80715230 | | | | * | | | 80715910 | |
| | OCF3 0 4D80 0017 | BSC 11 23 | EXIT SX | 80715240 | | | | * | FC | RM IS 5 | 80715920 | |
| | | * | | 80715250 | | | | * | | | 80715930 | |
| | | * | | 80715260 | | | 0D28 0 C218 | MER12 LD | 2 24 | GET PROG CT | 80715940 | |
| | | * BUSY | return | 80715270 | | | 0D29 0 D304 | STD | 3 4 | SET IN MSG | 80715950 80715960 | |
| | | * | | 80715280 | | | 0D2A 0 C2OC 002B 0 D3O5 | LD Std | 2 12 3 5 | GET TDTAL WRT CT SET IN MSG | 80715970 | |
| | OCF5 0 C116 | MERY1 LO 1 22 | GET AORS OF MSG | 80715290 | | | 0D2C 0 C20D | LD | 2 13 | GET TOTAL RD CT | 80715980 | |
| | OCF6 0 D001 | STD MERY2&1 | SAVE | 80715300 | | | 0D2D 0 D306 | STD | 3 6 | SET IN MSG | 80715990 | |
| | OCF7 0 6700 0000 OCF9 0 70EE | MERY2 LDX L3 0 MDX MER01 | IX 3 # ADRS DF MSG | 80715310 80715320 | | | 0D2E 0 C20E | LD | 2 14 | GET TOTAL RWD CT | 80716000 | |
| | 0019 0 7022 | * | | 80715330 | | | 0D2F 0 D307 | STD | 3 7 | SET IN MSG | 80716010 | |
| | | * CALL | L LDG | 80715340 | | | 0D30 0 C214 | LD | 2 20 | GET TOTAL ERASE CT | 80716020 | |
| | | * | | 80715350 | | • | 0D31 0 D308 | STD | 38 | SET IN MSG | 80716030 | |
| | OCFA 0 C302 | MLG01 LD 3 2 | GET MSG ID | 80715360 | | | 0032 0 C209 | LD | 2 9 | GET TOTAL TAPE PASS | 80716040 | |
| | OCFB O FOOD | EDR MLGXO | | 80715370 | | | 0D33 0 D309 | STD | 3 9 | SET IN MSG | 80716050 | |
| | OCFC 1 4C18 0D03 | BSC L MLGO4,&- | 8RANCH # PRDG CDMP | 80715380 | | | 0D34 0 C300 | LD EDR | 3 0 Merx9 | GET LINE SET WD CT | 80716060 80716070 | |
| | OCFE 1 C400 0802 | LD L SWO | | 80715390 | ļ | | 0D35 0 F002 0D36 0 D300 | STD | 3 0 | SET NO CT | 80716080 | |
| | 0D00 0 1802 | SRA 2 | | 80715400 | | | 0D37 0 7080 | MDX | MERO1 | GD PRINT | 80716090 | |
| | 0D01 1 4C04 0CF2 | 8SC L CLTER,E | 8RANCH IF 8YPASS LDG | 80715410 80715420 | | | 0D38 0 0007 | MERX9 DC | 7 | WD CT # 7 | 80716100 | |
| | 0D03 0 4480 012F | MLGO4 BSI I LOG | GD PRINT * | 80715430 | | | | * | | | 80716110 | |
| • | 0D05 0 0000 | MLG02 DC 0 | ADR DF MSG * | 80715440 | | | | * | F | ORM IS 6 DR 7 | 80716120 | |
| | 0D06 1 0D4E | DC MERYO | BUSY RETURN * | 80715450 | | | | * | | | 80716130 | |
| | 0D07 0 0000 | MLTER DC 0 | TERM ADRS * | 80715460 | | | 0D39 0 C206 | MER13 LD | 2 6 | GET EXP WD CT | 80716140 | |
| | | ************* | ********* | 80715470 | 1 | | 0D3A 0 D304 | STD | 3 4 | SET IN MSG | 80716150 | |
| | 0D08 0 70E9 | MDX CLTER | | 80715480 | | | 0 D38 0 C2 0 5 0D3C 0 D305 | LD Std | 2 5 3 5 | GET REC WD CT SET IN MSG | 80716160 80716170 | |
| | 0D09 0 D001 | MLGXO DC /DOO1 | ID 01# PRDG CDMPLETE | 80715490 | | | 003D 0 70DE | MOX | MER16 | GO SET MSG WO CT | 80716180 | |
| | | * * | W TC 1 | 80715500 | | | 0030 0 ,002 | * | 1121120 | 00 521 110 01 | 80716190 | |
| | | * FUR | M IS 1 | 80715510 80715520 | | | | * | FC | ORM IS 8 | 80716200 | |
| | 0D0A 0 C20B | MER06 LD 2 11 | GET WD CT FDR CK | 80715530 | | | | * | | | 80716210 | |
| | 0D08 0 0305 | STD 3 5 | SET IN MSG | 80715540 | | | OD3E 0 C210 | MER17 LD | 2 16 | GET RECDVERED RD CT | 80716220 | |
| | 0D0C 0 C216 | LD 2 22 | GET PATTERN WD | 80715550 | | | 0D3F 0 D304 | STD | 3 4 | SET IN MSG | 80716230 | |
| | 0D 0 D D 3 0 6 | STD 36 | SET IN MSG | 80715560 | | | 0D40 0 C211 | LD CTO | 2 17 | GET RECOVERED WT CT | 80716240 | |
| | ODOE O C2OA | LD 2 10 | GET REC CT | 80715570 | | | 0041 0 D305 0D42 0 C212 | STO | 3 5 | SET IN MSG GET UNRECOVERED READ | 80716250 807162 6 0 | |
| | 0D0F 0 9124 | S 1 36 | SU8 1 | 80715580 | | | 0D43 0 D306 | LD Std | 2 18 3 6 | SET IN MSG | 80716270 | |
| | 0D10 0 D304 | STD 3 4 | SET IN MSG | 80715590 | | | 0D44 0 C213 | LD | 2 19 | GET UNRECOVERED WRT | 80716280 | |
| | 0D11 0 C217 | LD 2 23 | GET WD READ | 80715600 80715610 | | | 0D45 0 70CC | MDX | MER19 | GD COMPLETE MSG | 80716290 | |
| | 0D12 0 D307 | MER19 STD 3 7 LD 3 0 | SET IN MSG GET LINE ND | 80715620 | | | 0D46 0 0005 | MERY5 DC | 5 | WD CT # 5 | 80716300 | |
| | 0D13 0 C300 0D14 0 F031 | EDR MERY5 | SET WO CT # 5 | 80715630 | | | | * | | | 80716310 | |
| | 0D15 0 D300 | STD 3 0 | | 80715640 | | | | * | F | ORM IS 9 | 80716320 | |
| | 0D16 0 70D1 | MDX MERO1 | GD PRINT | 80715650 | | | 00.7 6 6-6- | * | | AST 51:5 A 1955 | 80716330 | |
| | - | * | | 80715660 | | | 0D47 0 C203 | MER18 LD | 2 3 | GET FNC & MDD | 80716340 | |
| | | * FDRI | M IS 2 | 80715570 | | | 0D48 0 D304 | 310 | 3 4 | SET 1N MSG | 80716350 | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| DATE | 28FEB66 01JUL66 | 15MAY67 14NDV69 30 | OJAN7O | PRDG ID | 0807-1 | DATE | 28FE866 01JUL66 | | 14ND V69 | 30JAN70 | PROG ID | 0807-1 |
| EC ND. | 415120 415178 | | 31319A | PAGE | 12 | EC NO. | 415120 415178 | 411731 | 431319 | 431319A | PAGE | 12A |
| | | | | | | | | | | | | |

IBM NAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 24D0 FUNCTION TEST

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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 240D FUNCTION TEST

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PAGE

DD49 0 C3D0 MOX L MRSC,1 &1 TO RETURN 80717040 LD GET LINE NO 80716360 OD79 1 7401 09A3 3 0 0D4A 1 F400 0974 SRC 80717050 EOR L MTTWO SFT IX 3 SET WD CT # 2 80716370 OD7B 0 412E BSI 1 46 SX 80717060 004C D D300 STO 3 0 SAVE 80716380 OD7C 1 4C80 D9A3 BSC I MRSC RETURN * *** *** *** *** *** *** *** *** *** *** 80717070 DD4D 0 709A MDX MER 01 GO PRINT 80716390 80717080 80716400 **BUSY RETURNS** 80717090 80716410 ROUTINE TO SAVE DRIVE SELECTION FOR USE BY THE 80717100 80716420 DD4E 0 412E 80717110 MERYD BSI 1 46 SET IX 3 INTERRUPT ROUTINE SRC 80716430 SET MLSCF ENTRY 80717120 004F D 4323 RSI 3 35 SRC 80716440 80717130 * *** *** *** *** *** *** *** *** *** 0D5D 1 DCF5 DC MERY1 80716450 ************* 80716460 **OD7E 0 C35A** STACE LD 3 90 GET RETURN SE 80717140 80717150 0D51 0 4338 RSI 3 56 GO TO DIAG MON START* 80716470 0D7F 0 D10E STO 1 14 SAVE GET DR SEL 80717160 *************** 80716480 0D8D 1 C400 08CC STAC1 LD L ACMT OD82 1 4C20 008A BRANCH # NOT CLEAR 80717170 80716490 BSC L STAC2.Z 80717180 GET AREA CODE DR 0 MSG 80716500 0D84 0 C201 1 D 2 1 80716510 0D85 D F125 EOR 1 37 SET DRIVE SEL 80717190 80717200 DD52 0 00DD MERXD DC 0 LINE NO/WD CT 0 80716520 0D86 1 D40D 08CC STO L ACMT **OD53** D 0000 HEX/DEC SW 80716530 0D88 0 4D80 000E BSC 11 14 EXIT SX 80717210 0D54 0 0000 DC 0 80716540 80717220 MSG ID 80716550 ENTRY NOT CLEAR-SET RETURN 80717230 80716560 80717240 0055 0 0000 UNIT NUMBER 80716570 STAC2 BSI 3 35 GO SET MLSCF ENTRY SRC 80717250 nc. OD8A 0 4323 0 80717260 0056 0 0000 OC 0 MOD O 80716580 OD8B 1 OD80 OC STAC1 ******** 80717270 0057 0 0000 OC MOD 1 80716590 0 GO TO DIAG MON START* 0058 0 0000 DC MOO 2 80716600 OD8C 0 4338 BSI 3 56 80717280 0D59 0 0000 DC MOO 3 80716610 80717290 * *** *** *** *** *** *** *** *** *** 80717300 0D5A 0 0D00 OC 80716620 MOD 4 80717310 DD5B 0 0000 MOD 5 пC 80716630 80717320 80716640 ROUTINE TO REQUEST DEVICE OR 1 MSG 80716650 80717330 * *** *** *** *** *** *** *** *** *** 80717340 80716660 005C 0 0000 MERX1 DC 0 LINE NO/WD CT 80716670 GET RETURN 80717350 OD8D 0 C354 MTREE LO 3 84 80717360 0050 0 0000 OC 0 HEX/DEC SW 80716680 **OD8E 0 D12B** STO 1 43 SAVE 1 80716690 OD8F 1 C400 0815 MTRE1 LO L EOIT GET OOEF 80717370 005E 0 0000 DC MSG IO 0 IS DEVICE REQUESTED 80717380 80716700 0091 0 4828 BSC ЕZ 80717390 80716710 0092 0 7000 MDX MTBSY YES GET A XTNT OF ONE 80717400 0D5F 0 0001 nc UNIT NUMBER 80716720 0093 0 C124 LO 1 36 0D60 0 0000 MOO 0 80716730 STO L INTSW SET IO SW TO ON 80717410 0094 1 0400 0818 0061 0 0000 MOD 1 80716740 *** ********* *** *** *** *** *** *** *** *** *** *** 80717420 0062 0 0000 OC MOO 2 80716750 0096 0 4480 0131 BSI I REQOV REQUEST DEVICE 80717430 DC 80716760 0098 1 0040 MTRSY BUSY RETURN 80717440 0063 0 0000 MOO 3 DC. 80717450 OC. 80716770 AORS OF DDEF 0064 0 0000 FOIT 0 MOO 4 0099 1 0815 DC. 80717460 ADRS OF OVA 0D65 0 0000 OC Ω MOD 5 80716780 OD94 1 0819 OC. MTIO 80716790 0D9B 1 080E TERM AORS TERMINATOR 80717470 LOOP ON ERROR ENTRIES 80716800 *************** 80717480 80716810 OD9C 0 412E MTRE2 BSI 1 46 SET IX 3 80717490 DD66 0 4323 MERLO BSI 3 35 GO SET MLSCF ENTRY SPC 80716820 0D9D 0 435A BSI 3 90 GO SET OR SEL SRC 80717500 80717510 MON09 80716830 0D9E 0 4D80 002B EXIT SX 0067 1 0A2D OC BSC 11 43 MERL1 SLA 16 ZERO ACCUM 80716840 80717520 0068 0 1010 STO L ACMT DEVICE 1S BUSY 80717530 0069 1 D400 08CC SET IN OR SEL 80716850 80717540 006B 0 021A STO 2 26 SET IN DR BUSY SW 80716860 80716870 SET IX 3 006C D D21B STO 2 27 SET IN DR AVAL SW **ODAO 0 412E** MT8SY BSI 1 46 80717550 GO SET MLSCF ENTRY GO RELEASE DEVICE SRC 80716880 ODA1 0 4323 BSI 3 35 SRC 80717560 0060 0 4351 ************* 80716890 0DA2 1 008F MTRE1 80717570 OD6E 0 4338 BSI 3 56 GO TO DIAG MON START* 80716900 ************* 80717580 ************ 80716910 GO TO DIAG MON START* 80717590 00A3 0 4338 BSI 3 56 * *** *** *** *** *** *** *** *** *** ********** 80716920 80717600 * *** *** *** *** *** *** *** *** *** 80716930 80717610 ROUTINE TO SET I/O AREA 80716940 80717620 80716950 ROUTINE TO RELEASE DEVICE 80717630 * *** *** *** *** *** *** *** *** *** 80716960 80717640 MRSCE LO 2 15 * *** *** *** *** *** *** *** *** *** 006F 0 C20F GET WO CT 80716970 80717650 MTRLE LO 3 81 GET RETURN 80717660 MRSC1&1 80716980 00A4 0 C351 0070 0 0001 STO 0071 0 6700 0000 MRSC1 LOX L3 0 80717670 IX 3 # WO CT 80716990 ODA5 0 D12C STO 1 44 SAVE GET DOEF 0073 1 C480 09A3 LO I MRSC GET DATA WD 80717000 00A6 1 C400 0815 LD L EOIT 80717680 0075 1 0700 0901 MR SC2 STO L3 IOA SET IN I/O AREA 80717010 ODA8 0 4810 8 S C IS DEVICE REQUESTED 80717690 80717020 MTRL2 80717700 0D77 0 73FF MOX 3 -1 DECR IX 3 00A9 0 7004 0078 D 70FC MDX MRSC2 LOOP 80717030 ********** 80717710 28FEB66 01JUL66 15MAY67 14NOV69 30JAN70 PROG ID 0807-1 DATE 28FEB66 01JUL66 15MAY67 14N0V69 30JAN70 PROG ID 0807-1 PAGE

415120

EC NO.

415178

411731

431319

431319A

2400 FUNCTION TEST

| 0 4480 013 | MTRL1 BSI | I RELDV | RELEASE DEVICE | * | 90717720 |
|------------|-------------|-------------|------------------------|-----|----------------------|
| 0815 | DC | EDIT | ADRS OF DDEF | * | 80717730 |
| 080E | DC | TERM | ADRS TERMINATOR | * | 80717740 |
| | | | ********* | | |
| 412E | MTRL2 BSI | 1 46 | | | 80717750 |
| 4D80 0020 | | | SET IX 3 | SRC | 80717760 |
| 4000 002 | | 11 44 | EXIT | SX | 80717770 |
| | * | | | | 80717780 |
| | * | | | | 80717790 |
| | | ** *** *** | *** *** *** *** ** | ** | 80717800 |
| | * | ROU | ITINE TO SET INTERNAL | | 80717810 |
| | * | INT | RPT IGNDRE IN MONITOR | | 8071 782 0 |
| | * | | | | 80717830 |
| | * *** *** * | ** *** *** | *** *** *** *** *** | ** | 80717840 |
| C400 081 | INTIE LD | TERM&5 | GET ONLINE IND | | 80717850 |
| 4CA0 09E | | I INT1G.Z | BR IF NOT ZERO | | 80717860 |
| C400 07F | | - PID | GET PROG ID | | |
| | | _ | | | 80717870 |
| D400 013 | STO I | | SET IN MONITOR | 614 | 80717880 |
| CBO 09E | | I INTIG | EXIT | SX | 80717890 |
| | * | | | | 80717900 |
| | * | | | | 80717910 |
| | * *** *** * | ** *** *** | *** *** *** *** *** | ** | 80717920 |
| | * | | | | 80717930 |
| | * | Rnt | JTINE NUMBER 1 | | 80717940 |
| | * | | IND TEST | | 80717950 |
| | * | | | | 80717960 |
| | - | ** *** *** | *** *** *** *** *** | ** | |
| | | | | | 80717970 |
| 311 | FOLAA BSI | 3 17 | GO REWIND | SRC | 80717980 |
| 434C | BS1 | 3 76 | ROUTINE EXIT | | 80717990 |
| | | ** *** *** | *** *** *** *** ** | ** | 80718303 |
| | * | | | | 80718010 |
| | * | ROL | JTINE NUMBER 2 | | 80718020 |
| | * | | ITE-BACKSPACE-READ | | 80718030 |
| | * | | WORDS PER RECORD | | 80718040 |
| | * | | . ONES PATTERN | | 80718050 |
| | * | | | | 80718060 |
| | | ** *** *** | *** *** *** *** *** | ** | 80718070 |
| 311 | FOZAA BSI | 3 17 | GD REWIND | SRC | 80718080 |
| _ | FOZAB BSI | 3 53 | | _ | |
| 335 | | | GD TO SET UP RTN 2 | SRC | 80718090 |
| 32F | BS1 | 3 47 | GO SET I/O AREA | SRC | 80718100 |
| FFFF | FO2X2 DC | /FFFF | 00 110 - 5- | | 80718110 |
| 4317 | BSI | 3 23 | GO WRITE | SRC | 80718120 |
| 207 | LD | 2 7 | 1S DR AT TM | | 80718130 |
| B20 | BSC | Z | | | 80718140 |
| 34C | B\$1 | 3 76 | YES - ROUTINE EXIT | | 80718150 |
| 430E | BSI | 3 14 | GO BACKSPACE | SRC | 80718160 |
| +32F | BS1 | 3 47 | GO SET I/O AREA | SRC | 80718170 |
| 0000 | DC | 0 | 01 117 TO BOOK | 5 | 80718180 |
| COF7 | LD | F02X2 | GET PATTERN | | 80718190 |
| | | 2 22 | SET IN DST | | |
| D216 | STO | | | cnc | 80718200 |
| 4314 | 851 | 3 20 | GO READ | SRC | 80718210 |
| 0002 | DC | 2 | | | 80718220 |
| | * | | | | 80718230 |
| 4323 | BS I | 3 35 | GO SET MLSCF ENTRY | SRC | 80718240 |
| ODBE | DC | F02AB | | | 80718250 |
| 1010 | FO2AD SLA | 16 | ZERO ACCUM | | 80718260 |
| 218 | STO | 2 27 | SET IN DR AVAL SW | | 80718270 |
| | | | ******* | *** | 80718280 |
| 33B | BSI | 3 56 | GO TO DIAG MON STAF | | 80718290 |
| | | | ************ | | 80718300 |
| | | | *** *** *** *** *** | | 80718310 |
| | * | | | · | |
| | | | UTTALE MUROSO 3 | | 80718320 |
| | * | | UTINE NUMBER 3 | | 80718330 |
| | * | | ITE TO EDT-REWIND-READ | | 80718340 |
| | * | | EOT | | 80718350 |
| | * | 20 | WDRDS PER RECORD | | 80718360 |
| | * | | DATING ZERD PATTERN | | 80718370 |
| | * | | | | |
| | * | | | | 8071 83 80 |
| | . * | | *** *** *** *** *** * | ** | 80718380 80718390 |

| 0DD1 0 1010 | FO3AA S | | | | |
|--|---|---|---|---|--|
| | | A IS | 16 | RTN 3 ENTRANCE | 80718400 |
| | | | | OD TO COMMON DEN | |
| ODD2 0 7001 | ۲ | 1DX | F03AB | GD TO COMMON RTN | 80718410 |
| | * *** * | *** *** | *** *** *: | ** *** *** *** *** | 80718420 |
| | | | | | |
| | * | | | | 80718430 |
| | * | | POUT | INE NUMBER 4 | 80718440 |
| | | | | | |
| | * | | WRITE | E TO EOT-REWIND- | 80718450 |
| | * | | READ | TO EOT | 80718460 |
| | | | | | |
| | * | | 20 W | ORDS PER RECORD | 80718470 |
| | * | | FIDA | TING ONE PATTERN | 80718480 |
| | | | T LUA | ITHO UNE PATTERN | |
| | * | | | | 80718490 |
| | * *** | *** *** | *** *** * | ** *** *** *** *** | 8071 8500 |
| | | | | | |
| ODD3 0 C124 | FO4AA L | _D 1 | 36 | RTN 4 ENTRANCE | 80718510 |
| | | | | ** *** *** *** *** | |
| | | | *** *** * | | 80718520 |
| ODD4 0 D11B | FO3AB S | STO 1 | 24 | SAVE | 80718530 |
| _ | | _ | | | - |
| ODD5 0 4311 | | BSI 3 | 17 | GO REWIND SRC | 80718540 |
| ODD6 0 4335 | FO4AE E | BSI 3 | 53 | GO TO SET UP RTN 2 SRC | 80718550 |
| | | | | | |
| ODD7 0 C11B | L | _D 1 | 24 | GET RTN SW | 80718560 |
| ODD8 O DOO1 | 9 | STO | F04AJ&1 | SET | 80718570 |
| | | | _ | | |
| ODD9 0 6700 0000 | FO4AJ L | LDX L3 | 0 | IX 3 # 0 OR 1 | 80718580 |
| ODDB 1 C700 0E13 | 1 | D L3 | F04X2 | GET PATTRN ADDRS | 80718590 |
| | _ | _ | | | |
| ODDD 0 D004 | 5 | STO | F04AB&1 | SET | 80718600 |
| ODDE O 63EE | 1 | LDX 3 | -18 | | 80718610 |
| | | | | | |
| ODDF 0 6AOC | 5 | STX 2 | F 04AD&1 | SAVE IX 2 | 80718620 |
| ODEO O 62F7 | 1 | LDX 2 | -9 | | 80718630 |
| | | | | | |
| ODE1 0 C600 0000 | FO4AB L | LD L2 | 0 | GET WORD | 80718640 |
| ODE3 1 D700 09E5 | | | 10A&20 | SET IN I/D AREA | 80718650 |
| | | | | | |
| ODE5 0 7201 | | MDx 2 | 1 | DECR IX 2 | 80718560 |
| | | | F04AC | | |
| ODE6 0 7001 | | MD X | | | 80718670 |
| ODE7 0 62F7 | 1 | LDX 2 | -9 | RELDAD IX 2 | 80718680 |
| | | _ | | | |
| ODE8 0 7301 | FO4AC N | MUX 3 | 1 | DECR IX 3 | 80718690 |
| ODE9 0 70F7 | N | MDX | F04AB | LODP | 80718700 |
| | | | • | | |
| ODEA 0 412E | t | BSI 1 | 46 | SET IX 3 SRC | 80718710 |
| ODEB 0 6600 0000 | FO4AD L | INX I2 | 0 | RESTORE IX 2 | 80718720 |
| | | | _ | - | |
| ODED 1 C400 0802 | , l | LD L | SWO | GET SW FNC O | 80718730 |
| ODEF 0 1007 | | SLA | 7 | | 80718740 |
| | | | | | |
| ODFO 1 4C10 ODF4 | t | BSC L | F04AN,- | BRANCH # NOT CRC CK | 80718750 |
| ODF2 O CO2B | 1 | LD | MTFZ | GET F7FD | 80718760 |
| | | | . — | - · | |
| ODF3 0 D20A | | STO 2 | 10 | SET AS REC NO | B0718770 |
| | FO. 441 1 | DC1 2 | 23 | · | 0071 0700 |
| ODE4 O 4317 | | | | | |
| ODF4 0 4317 | FO4AN 1 | - | | GO WRITE SRC | 8071 8780 |
| | | - | | | |
| ODF5 0 C207 | ι | LD 2 | 7 | GET TM SW | 80718790 |
| ODF5 0 C207 ODF6 0 4820 | l 1 | LD 2 BSC | 7 Z | GET TM SW 1S DRIVE AT EOT | 80718790 80718800 |
| ODF5 0 C207 ODF6 0 4820 | l 1 | LD 2 BSC | 7 Z | GET TM SW 1S DRIVE AT EOT | 80718790 80718800 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 | ! ! | LD 2 BSC MDX | 7 Z F 04AF | GET TM SW 1S DRIVE AT EDT YES | 80718790 80718800 80718810 |
| ODF5 0 C207 ODF6 0 4820 | l 1 9 | LD 2 BSC MDX BSI 3 | 7 Z F 04AF 35 | GET TM SW 1S DRIVE AT EOT | 80718790 80718800 80718810 80718820 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 | l 1 9 | LD 2 BSC MDX BSI 3 | 7 Z F 04AF 35 | GET TM SW 1S DRIVE AT EDT YES | 80718790 80718800 80718810 80718820 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 | 1 1 1 | LD 2 BSC MDX BSI 3 DC | 7 Z F 04AF 35 F 04AE | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC | 80718790 80718800 80718810 80718820 80718830 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 | | LD 2 BSC MDX BSI 3 DC SLA | 7 Z F 04AF 35 F 04AE 16 | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM | 80718790 80718800 80718810 80718820 80718830 80718840 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 | | LD 2 BSC MDX BSI 3 DC SLA | 7 Z F 04AF 35 F 04AE 16 | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM | 80718790 80718800 80718810 80718820 80718830 80718840 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 | F0480 | LD 2 BSC MDX BSI 3 DC SLA STO 2 | 7 Z F 04AF 35 F 04AE 16 27 | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW | 80718790 80718800 80718810 80718820 80718830 80718840 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B | F04B0 : | LD 2 BSC MDX BSI 3 DC SLA STO 2 ****** | 7 Z F 04AF 35 F 04AE 16 27 | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW ************************************ | 80718790 80718800 80718810 80718820 80718830 80718840 80718850 80718860 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 | F04B0 : | LD 2 BSC MDX BSI 3 DC SLA STO 2 ****** | 7 Z F 04AF 35 F 04AE 16 27 | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW | 80718790 80718800 80718810 80718820 80718830 80718840 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B | F04B0 : | LD 2 BSC MDX BSI 3 DC SLA STO 2 ****** BSI 3 | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW ************************************ | 80718790 80718800 80718810 80718820 80718830 80718840 80718850 80718860 80718870 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B | F04B0 : ****** | LD 2 BSC MDX BSI 3 DC SLA STO 2 ****** BSI 3 ****** | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW ************************************ | 80718790 80718800 80718810 80718820 80718830 80718840 80718850 80718860 80718860 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B | F04B0 : | LD 2 BSC MDX BSI 3 DC SLA STO 2 ****** BSI 3 ****** | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW ************************************ | 80718790 80718800 80718810 80718820 80718830 80718840 80718850 80718860 80718870 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 | F04B0 : ***** ****** F04AF : | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* BSI 3 ******* | 7 Z F O4AF 35 F O4AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW ************************************ | 80718790 80718800 80718810 80718820 80718830 80718840 80718850 80718860 80718870 80718880 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B | F04B0 ****** ****** F04AF | LD 2 BSC MDX BSI 3 DC SLA STD 2 ******* BSI 3 ******* | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW *********************************** | 80718790 80718800 80718810 80718820 80718830 80718850 80718860 80718870 80718880 80718890 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 | F04B0 ****** ****** F04AF | LD 2 BSC MDX BSI 3 DC SLA STD 2 ******* BSI 3 ******* | 7 Z F O4AF 35 F O4AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW ************************************ | 80718790 80718800 80718810 80718820 80718830 80718840 80718850 80718860 80718870 80718880 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 | F04B0 ****** ****** F04AF | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* BSI 3 ******* STD 2 BSI 3 | 7 Z F 04AF 35 F 04AE 16 27 ************* 56 ************* 127 | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW *********************************** | 80718790 80718800 80718810 80718820 80718830 80718850 80718860 80718870 80718890 80718900 80718910 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OEOO 0 4335 | F04B0 : ****** ****** F04AF : F04AG | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* BSI 3 ******* STD 2 BSI 3 BSI 3 | 7 2 F 04AF 35 F 04AE 16 27 ************ 56 ********** 16 27 | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW ************************************ | 80718790 80718800 80718810 80718820 80718840 80718850 80718860 80718870 8071880 80718900 80718910 80718910 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 | F04B0 ****** ****** F04AF | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* BSI 3 ******* STD 2 BSI 3 BSI 3 | 7 Z F 04AF 35 F 04AE 16 27 ************* 56 ************* 127 | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW ************************************ | 80718790 80718800 80718810 80718820 80718840 80718850 80718860 80718870 8071880 80718900 80718910 80718910 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OE00 0 4335 OE01 0 432F | F04B0 ****** ****** F04AF | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* BSI 3 ****** SLA | 7 Z F 04AF 35 F 04AE 16 27 ************ 16 27 17 53 | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW ************************************ | 80718790 80718800 80718810 80718820 80718840 80718850 80718860 80718870 8071880 80718900 80718900 80718910 80718920 80718930 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODF8 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OEO0 0 4335 OEO1 0 432F OEO2 0 0000 | F04B0 : ****** ****** F04AF : F04AG | LD 2 BSC MDX MDX SSI 3 DC SLA STO 2 ******* SSI 3 ****** SLA STD 2 BSI 3 BSI 3 BSI 3 BC | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW ************************************ | 80718790 80718810 80718810 80718830 80718840 80718850 80718860 80718870 80718890 80718910 80718900 80718910 80718920 80718930 80718940 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OE00 0 4335 OE01 0 432F | F04B0 : ****** ****** F04AF : F04AG | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* SLA STD 2 BSI 3 ***** SLA STD 2 BSI 3 BSI 3 BSI 3 | 7 Z F 04AF 35 F 04AE 16 27 ************ 16 27 17 53 | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW ************************************ | 80718790 80718800 80718810 80718820 80718840 80718850 80718860 80718870 8071880 80718900 80718900 80718910 80718920 80718930 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OEO0 0 4335 OEO1 0 432F OEO2 0 0000 OEO3 0 C118 | F04B0 ****** ****** F04AF | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* SLA STD 2 BSI 3 BSI 3 BSI 3 DC LD 1 | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW *********************************** | 80718790 80718800 80718810 80718830 80718840 80718850 80718860 80718870 8071880 80718900 80718910 80718920 80718930 80718930 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OE00 0 4335 OE01 0 432F OE02 0 0000 OE03 0 C118 OE04 0 D001 | F04B0 ***** **** F04AF | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* SLA STD 2 BSI 3 BSI 3 BSI 3 BSI 3 BSI 3 DC LD 1 STO | 7 Z F 04AF 35 F 04AE 16 27 ********* 56 ********* 16 27 17 53 47 0 24 F 04 AK | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW *********************************** | 80718790 80718800 80718810 80718830 80718840 80718850 80718860 80718870 80718890 80718900 80718910 80718920 80718940 80718940 80718940 80718940 80718940 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OEO0 0 4335 OEO1 0 432F OEO2 0 0000 OEO3 0 C118 | F04B0 ***** **** F04AF | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* SLA STD 2 BSI 3 BSI 3 BSI 3 BSI 3 BSI 3 DC LD 1 STO | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW *********************************** | 80718790 80718800 80718810 80718830 80718840 80718850 80718860 80718870 8071880 80718900 80718910 80718920 80718930 80718930 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODFB 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OE00 0 4335 OE01 0 432F OE02 0 0000 OE03 0 C118 OE04 0 D001 OE05 0 4314 | F04B0 ***** ***** F04AF | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* BSI 3 ****** STD 2 BSI 3 | 7 Z F 04AF 35 F 04AE 16 27 ********* 56 ******* 16 27 17 53 47 0 24 F 04 AK 20 | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW *********************************** | 80718790 80718800 80718810 80718820 80718830 80718850 80718860 80718870 80718890 80718900 80718910 80718920 80718930 80718940 80718950 80718950 80718950 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OE00 0 4335 OE01 0 432F OE02 0 0000 OE03 0 C118 OE04 0 D001 | F04B0 : ******* ****** F04AF : F04AG : F04AK | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* BSI 3 ****** STD 2 BSI 3 | 7 Z F 04AF 35 F 04AE 16 27 ********* 56 ********* 16 27 17 53 47 0 24 F 04 AK | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW *********************************** | 80718790 80718800 80718810 80718820 80718830 80718850 80718860 80718870 8071880 80718900 80718910 80718920 80718930 80718940 80718950 80718950 80718950 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODFB 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODFB 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OE00 0 4335 OE01 0 432F OE02 0 0000 OE03 0 C118 OE04 0 D001 OE05 0 4314 | F04B0 ***** ***** F04AF | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* BSI 3 ****** STD 2 BSI 3 | 7 Z F 04AF 35 F 04AE 16 27 ********* 56 ******* 16 27 17 53 47 0 24 F 04 AK 20 | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW *********************************** | 80718790 80718800 80718810 80718820 80718830 80718850 80718860 80718870 8071880 80718900 80718910 80718920 80718930 80718940 80718950 80718950 80718950 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODF8 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D218 ODFC 0 4338 ODFD 0 1010 ODFE 0 D218 ODFF 0 4311 OE000 0 4335 OE01 0 432F OE02 0 0000 OE03 0 C118 OE04 0 D001 OE05 0 4314 OE06 0 0000 | F04B0 : ****** ****** F04AF : F04AG : F04AG : F04AK : * | LD 2 BSC MDX MDX STD 2 ******* SLA STD 2 ****** SLA STD 2 BSI 3 | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW ************************************ | 80718790 80718810 80718810 80718830 80718840 80718850 80718860 80718870 80718890 80718900 80718910 80718920 80718920 80718940 80718950 80718950 80718970 80718970 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODF8 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OE00 0 4335 OE01 0 432F OE02 0 0000 OE03 0 C118 OE04 0 D001 OE05 0 4314 OE06 0 0000 OE07 0 C204 | F04B0 : ****** ****** F04AF : F04AG : F04AK : * | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* SLA STD 2 BSI 3 BSI 3 BSI 3 DC LD 1 STO BSI 3 LD 2 | 7 Z F 04AF 35 F 04AE 16 27 ********* 56 ******* 16 27 17 53 47 0 24 F 04 AK 20 | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW *********************************** | 80718790 80718800 80718810 80718820 80718830 80718850 80718860 80718870 8071880 80718900 80718910 80718920 80718930 80718940 80718950 80718950 80718950 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODF8 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OE00 0 4335 OE01 0 432F OE02 0 0000 OE03 0 C118 OE04 0 D001 OE05 0 4314 OE06 0 0000 OE07 0 C204 | F04B0 : ****** ****** F04AF : F04AG : F04AK : * | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* SLA STD 2 BSI 3 BSI 3 BSI 3 DC LD 1 STO BSI 3 LD 2 | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW *********************************** | 80718790 80718800 80718810 80718830 80718840 80718850 80718860 80718860 80718870 80718900 80718910 80718920 80718930 80718940 80718950 80718950 80718970 80718970 80718970 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODF8 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OE00 0 4335 OE01 0 432F OE02 0 0000 OE03 0 C118 OE04 0 D001 OE05 0 4314 OE06 0 0000 OE07 0 C204 OE08 0 4820 | F04B0 ***** ***** F04AF F04AG | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* SLA STD 2 BSI 3 BSI 3 BSI 3 BSI 3 DC LD 1 STO BSI 3 DC LD 2 BSC | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW *********************************** | 80718790 80718800 80718810 80718830 80718830 80718850 80718860 80718860 80718890 80718900 80718910 80718920 80718940 80718950 80718950 80718960 80718970 80718990 80718990 80718900 80719000 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODF8 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OE00 0 4335 OE01 0 432F OE02 0 0000 OE03 0 C118 OE04 0 D001 OE05 0 4314 OE06 0 0000 OE07 0 C204 | F04B0 ***** ***** F04AF F04AG | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* SLA STD 2 BSI 3 BSI 3 BSI 3 DC LD 1 STO BSI 3 LD 2 | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW *********************************** | 80718790 80718800 80718810 80718830 80718840 80718850 80718860 80718860 80718870 80718900 80718910 80718920 80718930 80718940 80718950 80718950 80718970 80718970 80718970 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODF8 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OE00 0 4335 OE01 0 432F OE02 0 0000 OE03 0 C118 OE04 0 D001 OE05 0 4314 OE06 0 0000 OE07 0 C204 OE08 0 4820 OE09 0 7003 | F04B0 ***** **** F04AF F04AG | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* B****** STD 2 BSI 3 BSI 3 BSI 3 BSI 3 DC LD 1 STO BSI 3 LD 1 STO BSI 3 LD 2 BSI 3 LD 1 STO BSI 3 LD 2 BSI 3 LD 1 STO BSI 3 LD 1 STO BSI 3 LD 2 BSI 3 LD 1 STO BSI 3 LD 1 STO BSI 3 LD 1 STO BSI 3 LD 1 | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW ************************************ | 80718790 80718800 80718810 80718830 80718830 80718850 80718850 80718860 80718860 80718900 80718900 80718910 80718920 80718940 80718940 80718940 80718950 80718960 80718970 80718970 80718970 80718970 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODF8 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OE00 0 4335 OE01 0 432F OE02 0 0000 OE03 0 C118 OE05 0 4314 OE06 0 0000 OE07 0 C204 OE08 0 4820 OE09 0 7003 OE0A 0 4323 | F04B0 : ******* ****** F04AF : ** F04AG : ** | LD 2 BSC MDX STO 2 ******* SLA STO 2 ****** SLA STD 2 BSI 3 BSI 3 BSI 3 BSI 3 DC 1 STO 1 STO 2 BSI 3 | 7 Z F O4AF 35 F O4AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW *********************************** | 80718790 80718800 80718810 80718820 80718840 80718850 80718850 80718870 80718890 80718900 80718920 80718920 80718920 80718940 80718950 80718950 80718950 80718960 80718970 8071890 8071890 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODF8 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OE00 0 4335 OE01 0 432F OE02 0 0000 OE03 0 C118 OE04 0 D001 OE05 0 4314 OE06 0 0000 OE07 0 C204 OE08 0 4820 OE09 0 7003 | F04B0 : ******* ****** F04AF : ** F04AG : ** | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******* B****** STD 2 BSI 3 BSI 3 BSI 3 BSI 3 DC LD 1 STO BSI 3 LD 1 STO BSI 3 LD 2 BSI 3 LD 1 STO BSI 3 LD 2 BSI 3 LD 1 STO BSI 3 LD 1 STO BSI 3 LD 2 BSI 3 LD 1 STO BSI 3 LD 1 STO BSI 3 LD 1 STO BSI 3 LD 1 | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW ************************************ | 80718790 80718800 80718810 80718830 80718830 80718850 80718850 80718860 80718860 80718900 80718900 80718910 80718920 80718940 80718940 80718940 80718950 80718960 80718970 80718970 80718970 80718970 |
| ODF5 O C207 ODF6 O 4820 ODF7 O 7005 ODF8 O 4323 ODF9 1 ODD6 ODFA O 1010 ODF8 O D218 ODFC O 4338 ODFD O 1010 ODFE O D218 ODFF O 4311 OE00 O 4335 OE01 O 432F OE02 O 0000 OE03 O C118 OE04 O D001 OE05 O 4314 OE06 O 0000 OE07 O C204 OE08 O 4820 OE09 O 7003 OE0A O 4323 OEOB 1 OE00 | F04B0 : ****** ****** F04AF : F04AG : F04AG : F04AK : * | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******** SLA STD 2 BSI 3 BSI 3 BSI 3 BSI 3 BSI 3 BSI 3 DC LD 1 STO BSI 3 DC LD 2 BSI 3 DC LD 1 STO BSI 3 DC LD 2 BSI 3 DC LD 2 BSI 3 DC LD 2 | 7 Z F O4AF 35 F O4AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW ************************************ | 80718790 80718800 80718810 80718830 80718840 80718850 80718850 80718870 80718890 80718900 80718910 80718920 80718940 80718950 80718950 80718970 80718970 80718970 80718970 8071890 8071890 8071890 8071900 80719010 80719010 80719010 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODF8 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OE00 0 4335 OE01 0 432F OE02 0 0000 OE03 0 C118 OE05 0 4314 OE06 0 0000 OE07 0 C204 OE08 0 4820 OE09 0 7003 OE0A 0 4323 | F04B0 ***** ***** F04AF F04AG F04AG | LD 2 BSC MDX STO 2 ******* SLA STO 2 ****** SLA STD 2 BSI 3 BSI 3 BSI 3 BSI 3 DC 1 STO 1 STO 2 BSI 3 | 7 Z F O4AF 35 F O4AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW ************************************ | 80718790 80718800 80718810 80718830 80718840 80718850 80718860 80718860 80718890 80718900 80718910 80718920 80718930 80718940 80718950 80718950 80718960 80718970 80718980 8071890 8071890 8071890 80719900 80719010 80719010 |
| ODF5 O C207 ODF6 O 4820 ODF7 O 7005 ODF8 O 4323 ODF9 1 ODD6 ODFA O 1010 ODF8 O D218 ODFC O 4338 ODFD O 1010 ODFE O D218 ODFF O 4311 OE00 O 4335 OE01 O 432F OE02 O 0000 OE03 O C118 OE04 O D001 OE05 O 4314 OE06 O 0000 OE07 O C204 OE08 O 4820 OE09 O 7003 OE0A O 4323 OEOB 1 OE00 | F04B0 : ****** ****** F04AF : F04AG : F04AG : F04AK : * | LD 2 BSC MDX BSI 3 DC SLA STO 2 ******** SLA STD 2 BSI 3 BSI 3 BSI 3 BSI 3 BSI 3 BSI 3 DC LD 1 STO BSI 3 DC LD 2 BSI 3 DC LD 1 STO BSI 3 DC LD 2 BSI 3 DC LD 2 BSI 3 DC LD 2 | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW ************************************ | 80718790 80718800 80718810 80718830 80718840 80718850 80718850 80718870 80718890 80718900 80718910 80718920 80718940 80718950 80718950 80718970 80718970 80718970 80718970 8071890 8071890 8071890 8071900 80719010 80719010 80719010 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODF8 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OE00 0 4335 OE01 0 432F OE02 0 0000 OE03 0 C118 OE04 0 D001 OE05 0 4314 OE06 0 0000 OE07 0 C204 OE08 0 4820 OE09 0 7003 OEOA 0 4323 OEOB 1 OE00 OEOC 0 70ED | F04B0 ***** ***** F04AF F04AG F04AK * | LD 2 BSC MDX SLA STO 2 ******* SLA STD 2 BSI 3 BSI 3 BSI 3 BSI 3 DC LD 1 STO BSI 3 DC LD 2 BSC MDX BSI 3 MDX BSI 3 | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW *********************************** | 80718790 80718800 80718810 80718830 80718840 80718850 80718860 80718870 8071880 80718900 80718910 80718920 80718930 80718940 80718950 80718960 80718960 80718960 80719000 80719000 80719000 80719000 80719040 80719050 80719050 |
| ODF5 O C207 ODF6 O 4820 ODF7 O 7005 ODF8 O 4323 ODF9 1 ODD6 ODFA O 1010 ODF8 O D218 ODFC O 4338 ODFD O 1010 ODFE O D218 ODFF O 4311 OE00 O 4335 OE01 O 432F OE02 O 0000 OE03 O C118 OE04 O D001 OE05 O 4314 OE06 O 0000 OE07 O C204 OE08 O 4820 OE09 O 7003 OE0A O 4323 OEOB 1 OE00 | F04B0 ***** ***** F04AF F04AG F04AG | LD 2 BSC MDX SLA STO 2 ******* SLA STD 2 BSI 3 BSI 3 BSI 3 BSI 3 DC LD 1 STO BSI 3 DC LD 2 BSC MDX BSI 3 MDX BSI 3 | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW *********************************** | 80718790 80718800 80718810 80718830 80718840 80718850 80718860 80718860 80718890 80718900 80718910 80718920 80718930 80718940 80718950 80718950 80718960 80718970 80718980 8071890 8071890 8071890 80719900 80719010 80719010 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODF8 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OE00 0 4335 OE01 0 432F OE02 0 0000 OE03 0 C118 OE04 0 D001 OE05 0 4314 OE06 0 0000 OE07 0 C204 OE08 0 4820 OE09 0 7003 OEOA 0 4323 OEOB 1 OE00 OEOC 0 70ED | F04B0 ***** ***** F04AF F04AG F04AK * | LD 2 BSC MDX SLA STO 2 ******* SLA STD 2 BSI 3 BSI 3 BSI 3 BSI 3 DC LD 1 STO BSI 3 DC LD 2 BSC MDX BSI 3 MDX BSI 3 | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW *********************************** | 80718790 80718800 80718810 80718830 80718840 80718850 80718860 80718870 8071880 80718900 80718910 80718920 80718930 80718940 80718950 80718960 80718960 80718960 80719000 80719000 80719000 80719000 80719040 80719050 80719050 |
| ODF5 0 C207 ODF6 0 4820 ODF7 0 7005 ODF8 0 4323 ODF9 1 ODD6 ODFA 0 1010 ODF8 0 D21B ODFC 0 4338 ODFD 0 1010 ODFE 0 D21B ODFF 0 4311 OE00 0 4335 OE01 0 432F OE02 0 0000 OE03 0 C118 OE04 0 D001 OE05 0 4314 OE06 0 0000 OE07 0 C204 OE08 0 4820 OE09 0 7003 OEOA 0 4323 OEOB 1 OE00 OEOC 0 70ED | F04B0 ***** ***** F04AF F04AG F04AK * | LD 2 BSC MDX SLA STO 2 ******* SLA STD 2 BSI 3 BSI 3 BSI 3 BSI 3 DC LD 1 STO BSI 3 DC LD 2 BSC MDX BSI 3 MDX BSI 3 | 7 Z F 04AF 35 F 04AE 16 27 *********************************** | GET TM SW 1S DRIVE AT EDT YES GO SET MLSCF ENTRY SRC ZERD ACCUM SET IN DR AVAL SW *********************************** | 80718790 80718800 80718810 80718830 80718840 80718850 80718860 80718870 8071880 80718900 80718910 80718920 80718930 80718940 80718950 80718960 80718960 80718960 80719000 80719000 80719000 80719000 80719040 80719050 80719050 |

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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM
2400 FUNCTION TEST

28FEB66 01JUL66 15MAY67 14NOV69 30JAN70

415120 415178 411731 431319 431319A

DATE

EC NO.

PART NO. 2196370 PAGE 15 13M MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2400 FUNCTION TEST

PART NO. 2196370 PAGE 15A

PROG ID 0807-1

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PAGE

| 0E 0F 0 1007 | SLA 7 | 80719080 | DE35 0 412E | BSI 1 46 SET IX 3 SRC 80 | 0719780 |
|--|--|--|--|---|---|
| 0E10 0 4828 | | | | | |
| | 8SC &Z IS RD ONLY SW ON | 80719090 | 0E36 0 D001 | | 0719790 |
| 0E11 0 70E8 | MDX F04AF YES | 80719100 | 0E37 0 432F | BSI 3 47 GO SET I/O AREA SRC AC | 0719800 |
| 0E12 0 434C | FO4AM 8SI 3 76 ROUTINE EXIT | 80719110 | 0E38 0 0000 | F06AH DC 0 90 | 0719810 |
| | • | | 0E39 0 4317 | | 0719820 |
| | | 90719120 | | | |
| | * CONSTANTS | 80719130 | 0E3A 0 C207 | LD 27 GET TM SW 80 | 0719830 |
| | * | 80719140 | 0E3B 0 4820 | BSC Z IS DR AT EDT 80 | 0719840 |
| 0E13 1 0E27 | FO4X2 DC MTFZE9 PATTERN ADRS | 80719150 | DE3C 0 7D05 | | 0719850 |
| | | | | | |
| 0E14 1 0E1E | DC MTF1&9 | 80719160 | UE3D 0 4323 | | 0719860 |
| | * *** *** *** *** *** *** *** *** *** | 80719170 | 0E3E 1 0E2C | DC F06A8 80 | 0719870 |
| | * | 80719180 | 0E3F 0 1010 | | 2719882 |
| | FLOATING OUT OUTSON | | | | |
| | * FLOATING ONE PATTERN | 80719190 | 0E40 0 D21B | | 0719890 |
| | * *** *** *** *** *** *** *** *** *** *** | 80719200 | | *********** | 0719900 |
| | * | 80719210 | 0E41 0 4338 | 8SI 3 56 GO TO DIAG MON-START* 80 | 0719910 |
| 0E15 D 08D2 | MTF1 DC /D802 FLOATING ONE PATTERN | | 02,10,1350 | | |
| _ | • | 80719220 | | | 0719920 |
| 0E16 0 8040 | DC /8040 | 80719230 | 0E42 0 1010 | FOGAC SLA 16 80 | 0719930 |
| 0E17 0 2000 | DC /2000 | 80719240 | 0E43 0 D21B | STO 2 27 SET IN DR AVAL SW 80 | 0719940 |
| 0E18 0 1001 | DC /1001 | 80719250 | 0E44 0 4311 | | 0719950 |
| | | | | | |
| 0E19 0 0408 | DC /0408 | 80719260 | 0E45 0 4335 | | 0719960 |
| 0E1A 0 0280 | DC /0280 | 80719270 | 0E46 0 C342 | LD 3 66 GET WC # 8 80 | 0719970 |
| 0E18 0 4020 | DC /4020 | 80719280 | 0E47 0 D20F | STO 2 15 SET IN DST 80 | 0719980 |
| | | | 0E48 0 432F | | |
| OE1C 0 CO10 | · · · · · · · · · · · · · · · · · · · | 80719290 | | | 0719990 |
| 0E1D 0 0104 | , DC /0104 | 80719300 | DE49 0 0000 | DC 0 | 0720000 |
| | * *** *** *** *** *** *** *** *** *** | 80719330 | DE4A 0 C119 | | 0720010 |
| | | | 0E48 0 D001 | | |
| | | 80719340 | | | 0720020 |
| | * FLOATING ZERO PATTERN | 80719350 | 0E4C 0 6700 0000 | F06AJ LDX L3 0 80 | 0720039 |
| | * | 80719360 | 0E4E 1 C700 0E58 | LD L3 F06X2 GET PATTERN 80 | 0720040 |
| | * *** *** *** *** *** *** *** *** *** *** | | DE50 0 D216 | | |
| | | 80 71 93 70 | | | 0 72005 0 |
| 0E1E 0 F7FD | MTFZ DC /F7FD FLOATING ZERO PATTERN | 80 7 19380 | 0E51 0 412E | | 0720060 |
| 0E1F 0 7F8F | DC /7F8F | 80719390 | 0E52 0 4314 | 8SI 3 20 GO READ SRC 80 | 0720070 |
| 0E20 0 DFFF | DC /DFFF | 80719400 | 0E53 0 CCO2 | | 0720080 |
| | | | | | |
| 0E21 0 EFFE | DC /EFFE | 80719410 | 0E54 0 C204 | | 0720090 |
| 0E22 0 F8F7 | DC /F8F7 | 80719420 | 0E 55 0 4820 | 8SC Z IS DR AT TM 90 | 0720100 |
| 0E23 0 FD7F | DC /FD7F | 80719430 | 0E56 0 7003 | | 0720110 |
| OE24 O BFDF | DC /8FDF | | | | |
| | | 80719440 | 0553 0 4000 | 80 | 0720120 |
| OE25 O FFEF | DC /FFEF | 80719450 | 0E57 0 4323 | 8SI 3 35 GO SET MLSCF ENTRY SRC 80 | 0720130 |
| 0E26 0 FEFB | DC /FEF8 | 8071 9460 | 0E58 1 0E45 | DC F06AD 80 | 0720140 |
| | * *** *** *** *** *** *** *** *** *** | 80719470 | 0E59 0 7CE5 | • | |
| | | | 0139 0 1013 | | 0720150 |
| | * | 80719480 | | | 0720160 |
| | * ROUTINE NUMBER 5 | 80719490 | 0E5A 0 434C | FOGAE BSI 3 76 ROUTINE EXIT 90 | 0720170 |
| | * WRITE TO EOT-REWIND | | | _ | 0720180 |
| | WILLE TO COT WENTING | 80 /19500 | | - 00 | 7120160 |
| | TO TO TOT | 80719500 | | + CONCEANTS | 1700100 |
| | * READ TO EOT | 80719510 | | * CONSTANTS 80 | 0720190 |
| | * READ TO EOT * 8 WORDS PER RECORD | | | CONSTANTS | 0720190 0720200 |
| | * 8 WORDS PER RECORD | 80719510 80719520 | 0E58 0 0000 | * 80 | 720200 |
| | _ - | 80719510 80719520 80719530 | 0E58 0 0000 | * 80 F06X2 DC 0 80 | 0720200 0720210 |
| | * 8 WORDS PER RECORD * ALL ZERO PATTERN * | 80719510 80719520 80719530 80719540 | 0E58 0 0000 0E5C 0 A943 | * 80 F06X2 DC 0 80 DC /A943 80 | 0720200 0720210 0720220 |
| | * 8 WORDS PER RECORD | 80719510 80719520 80719530 | | * 80 F06X2 DC 0 80 DC /A943 80 | 0720200 0720210 |
| 0E27 0 101D | * 8 WORDS PER RECORD * ALL ZERO PATTERN * * *** *** *** *** *** *** *** *** * | 80719510 80719520 80719530 80719540 80719550 | | * F06X2 DC 0 80 DC /A943 * *** *** *** *** *** *** *** *** *** | 0720200 0720210 0720220 0720230 |
| 0E27 0 101D 0F28 0 7001 | * 8 WORDS PER RECORD * ALL ZERO PATTERN * * *** *** *** *** *** *** *** *** * | 80719510 80719520 80719530 80719540 80719550 90719560 | | * 80 F06X2 DC 0 90 DC /A943 * *** *** *** *** *** *** *** *** *** * | 0720200 0720210 0720220 0720230 0720240 |
| 0E27 0 101D 0E28 0 7001 | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719530 80719540 80719550 80719560 80719570 | | * 80 F06X2 DC 0 80 DC /A943 * *** *** *** *** *** *** *** *** * RDUTINE NUMBER 7 80 | 0720200 0720210 0720220 0720230 0720240 0720250 |
| | * 8 WORDS PER RECORD * ALL ZERO PATTERN * * *** *** *** *** *** *** *** *** * | 80719510 80719520 80719530 80719540 80719550 80719560 80719570 80719580 | | * F06X2 DC 0 80 DC /A943 80 * *** *** *** *** *** *** *** *** *** | 0720200 0720210 0720220 0720230 0720240 0720250 |
| | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719530 80719540 80719550 80719560 80719570 | | * F06X2 DC 0 80 DC /A943 80 * *** *** *** *** *** *** *** *** *** | 0720200 0720210 0720220 0720230 0720240 0720250 |
| | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719530 80719540 80719550 80719560 80719570 80719570 | | * F06X2 DC 0 80 DC /A943 * *** *** *** *** *** *** *** *** *** | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720270 |
| | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719530 80719540 80719550 80719560 80719570 80719580 80719580 | 0E5C 0 A943 | * F06X2 DC 0 80 DC /A943 * *** *** *** *** *** *** *** *** *** | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720260 0720280 |
| | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719540 80719550 80719550 80719570 80719570 80719580 80719590 80719610 | 0E5C 0 A943 0E5D 0 4332 | * F06X2 DC 0 80 DC /A943 * *** *** *** *** *** *** *** *** *** | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720270 0720280 0720280 |
| | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719530 80719540 80719550 80719560 80719570 80719580 80719580 | 0E5C 0 A943 | * F06X2 DC 0 80 DC /A943 * *** *** *** *** *** *** *** *** *** | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720260 0720280 |
| | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719530 80719540 80719550 80719560 80719570 80719580 80719590 80719610 80719610 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F | * F06X2 DC 0 80 DC /A943 * *** *** *** *** *** *** *** *** *** | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720270 0720280 0720290 |
| | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719530 80719540 80719550 80719560 80719570 80719580 80719590 80719610 80719610 80719620 80719630 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF | * F06X2 DC | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720270 0720280 0720290 0720310 |
| | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719530 80719540 80719550 80719560 80719570 80719580 80719590 80719610 80719620 80719620 80719630 80719640 | 0E5D 0 4332 0E5D 0 432F 0E5F 0 432F 0E5F 0 FFFF 0E60 0 C028 | * F06X2 DC | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720270 0720280 0720290 0720300 0720310 0720320 |
| | * 8 WORDS PER RECORD ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719530 80719540 80719550 80719560 80719570 80719580 80719590 80719610 80719610 80719620 80719630 | 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF 0E60 0 C028 0E61 0 D35E | * F06X2 DC | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720270 0720280 0720290 0720310 |
| | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719520 80719540 80719550 80719560 80719570 80719580 80719590 80719610 80719620 80719620 80719630 80719640 | 0E5D 0 4332 0E5D 0 432F 0E5F 0 432F 0E5F 0 FFFF 0E60 0 C028 | * F06X2 DC | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720270 0720280 0720290 0720310 0720310 0720330 |
| 0E28 0 7001 | * 8 WORDS PER RECORD ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719520 80719540 80719550 80719550 80719570 80719580 80719590 80719600 80719610 80719620 80719640 80719640 80719650 80719660 | 0E5D 0 4332 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFF 0E6O 0 C028 0E61 0 D35E 0E62 0 C343 | * F06X2 DC | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720280 0720280 0720300 0720310 0720320 0720330 |
| | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719530 80719540 80719550 80719560 80719570 80719580 80719690 80719610 80719610 80719630 90719640 80719650 80719650 80719660 80719660 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF 0E60 0 C028 0E61 0 D35E 0E62 0 C343 0E63 0 D35D | * F06X2 DC | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720270 0720280 0720280 0720310 0720310 0720320 0720330 |
| 0E28 0 7001 | * 8 WORDS PER RECORD ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719530 80719550 80719550 80719560 80719580 80719580 80719600 80719610 80719620 80719640 90719650 80719650 80719650 80719660 80719670 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF 0E60 0 C028 0E61 0 D35E 0E62 0 C343 0E63 0 D35D 0E64 0 D370 | * F06X2 DC | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720270 0720280 0720280 0720310 0720310 0720330 0720330 0720340 0720350 0720350 |
| 0E28 0 7001 | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719530 80719540 80719550 80719560 80719570 80719580 80719690 80719610 80719610 80719630 90719640 80719650 80719650 80719660 80719660 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF 0E60 0 C028 0E61 0 D35E 0E62 0 C343 0E63 0 D35D | * F06X2 DC | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720270 0720280 0720280 0720310 0720310 0720320 0720330 |
| 0E28 0 7001 0E29 0 C124 0E2A 0 D119 | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719530 80719540 80719550 80719560 80719570 80719580 80719590 80719610 80719620 80719630 90719640 80719650 80719670 80719670 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF 0E60 0 C028 0E61 0 D35E 0E62 0 C343 0E63 0 D35D 0E64 0 D370 0E65 0 C027 | * F06X2 DC | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720280 0720280 0720290 0720310 0720330 0720330 0720330 0720330 0720330 0720330 |
| 0E28 0 7001 0E29 0 C124 0E2A 0 D119 0E2B 0 4311 | * 8 WORDS PER RECORD ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719520 80719540 80719550 80719550 80719570 80719580 80719590 80719610 80719620 80719640 80719640 80719650 80719650 80719650 80719670 80719690 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF 0E60 0 C028 0E61 0 D35E 0E62 0 C343 0E63 0 D35D 0E64 0 D370 0E65 0 C027 0E66 0 D367 | * F06X2 DC | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720280 0720280 0720390 0720310 0720330 0720340 0720340 0720350 0720370 0720380 |
| 0E28 0 7001 0E29 0 C124 0E2A 0 D119 0E2B 0 4311 0E2C 0 4335 | * 8 WORDS PER RECORD ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719520 80719540 80719550 80719550 80719570 80719590 80719590 80719610 80719620 80719640 80719650 90719660 80719670 80719690 80719690 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF 0E60 0 C028 0E61 0 D35E 0E62 0 C343 0E63 0 D35D 0E64 0 D370 0E65 0 C027 0E66 0 D367 DE67 D C2DA | * F06X2 DC | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720280 0720290 0720310 0720310 0720320 0720330 0720330 0720330 0720330 0720340 0720350 0720350 0720350 0720360 0720380 0720380 0720380 |
| 0E28 0 7001 0E29 0 C124 0E2A 0 D119 0E2B 0 4311 | * 8 WORDS PER RECORD ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719520 80719540 80719550 80719550 80719570 80719580 80719590 80719610 80719620 80719640 80719640 80719650 80719650 80719650 80719670 80719690 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF 0E6O 0 C028 0E61 0 D35E 0E62 0 C343 0E63 0 D35D 0E64 0 D370 0E65 0 C027 0E66 0 D367 DE67 D C2DA 0E68 0 D368 | * F06X2 DC | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720280 0720280 0720390 0720310 0720320 0720340 0720340 0720350 0720370 0720380 |
| 0E28 0 7001 0E29 0 C124 0E2A 0 D119 0E2B 0 4311 0E2C 0 4335 0E2D 0 C342 | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719530 80719540 80719550 80719550 80719570 80719580 80719640 80719610 80719620 80719640 80719660 80719660 80719690 80719700 80719700 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF 0E60 0 C028 0E61 0 D35E 0E62 0 C343 0E63 0 D35D 0E64 0 D370 0E65 0 C027 0E66 0 D367 DE67 D C2DA | * F06X2 DC | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720280 0720280 0720310 0720310 0720320 0720330 0720330 0720330 0720330 0720330 0720360 0720360 0720380 0720380 0720380 0720380 |
| 0E28 0 7001 0E29 0 C124 0E2A 0 D119 0E2B 0 4311 0E2C 0 4335 0E2D 0 C342 0E2E 0 D20F | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719530 80719550 80719550 80719560 80719580 80719580 80719600 80719610 80719620 80719640 90719650 80719660 80719670 80719700 80719700 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF 0E60 0 C028 0E61 0 D35E 0E62 0 C343 0E63 0 D35D 0E64 0 D370 0E65 0 C027 0E66 0 D367 DE67 D C2DA 0E68 0 D368 0E69 0 C34F | * F06X2 DC | 0720200 0720210 0720220 0720230 0720250 0720250 0720260 0720270 0720280 0720310 0720310 0720310 0720330 0720330 0720330 0720330 0720330 0720330 0720330 0720330 0720330 |
| 0E28 0 7001 0E29 0 C124 0E2A 0 D119 0E2B 0 4311 0E2C 0 4335 0E2D 0 C342 0E2E 0 D20F 0E2F 0 C119 | * 8 WORDS PER RECORD ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719530 80719540 80719550 80719560 80719570 80719580 80719590 80719610 80719610 80719620 80719630 90719650 80719650 80719690 80719690 80719700 80719700 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF 0E60 0 C028 0E61 0 D35E 0E62 0 C343 0E63 0 D35D 0E64 0 D370 0E65 0 C027 0E66 0 D367 DE67 D C2DA 0E68 0 D368 0E69 0 C34F 0E6A 0 D202 | # F06X2 DC | 0720200 0720210 0720220 0720230 0720250 0720250 0720260 0720270 0720280 0720390 0720310 0720330 0720330 0720330 0720350 0720350 0720360 0720360 0720370 0720380 0720380 0720380 0720380 0720380 0720380 0720380 |
| 0E28 0 7001 0E29 0 C124 0E2A 0 D119 0E2B 0 4311 0E2C 0 4335 0E2D 0 C342 0E2E 0 D20F 0E2F 0 C119 0E30 0 D001 | * 8 WORDS PER RECORD ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719520 80719540 80719550 80719550 80719570 80719580 80719590 80719620 80719620 80719640 80719650 80719660 80719670 80719670 80719720 80719730 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF 0E60 0 C028 0E61 0 D35E 0E62 0 C343 0E63 0 D35D 0E64 0 D370 0E65 0 C027 0E66 0 D367 DE67 D C2DA 0E68 0 D368 0E69 0 C34F 0E6A 0 D202 0E68 0 C123 | # F06X2 DC | 0720200 0720210 0720220 0720230 0720250 0720250 0720260 0720280 0720280 0720280 0720310 0720310 0720330 0720330 0720340 0720350 0720350 0720360 0720380 0720380 0720380 0720380 0720380 0720380 0720380 0720380 |
| 0E28 0 7001 0E29 0 C124 0E2A 0 D119 0E2B 0 4311 0E2C 0 4335 0E2D 0 C342 0E2E 0 D20F 0E2F 0 C119 | * 8 WORDS PER RECORD ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719530 80719540 80719550 80719560 80719570 80719580 80719590 80719610 80719610 80719620 80719630 90719650 80719650 80719690 80719690 80719700 80719700 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF 0E60 0 C028 0E61 0 D35E 0E62 0 C343 0E63 0 D35D 0E64 0 D370 0E65 0 C027 0E66 0 D367 DE67 D C2DA 0E68 0 D368 0E69 0 C34F 0E6A 0 D202 | # F06X2 DC | 0720200 0720210 0720220 0720230 0720250 0720250 0720260 0720280 0720280 0720290 0720310 0720310 0720320 0720330 0720340 0720360 0720360 0720380 0720380 0720380 0720380 0720380 0720380 0720380 0720380 0720380 0720380 |
| 0E28 0 7001 0E29 0 C124 0E2A 0 D119 0E2B 0 4311 0E2C 0 4335 0E2D 0 C342 0E2E 0 D20F 0E2F 0 C119 0E30 0 D001 0E31 0 6700 0000 | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719520 80719540 80719550 80719550 80719570 80719590 80719590 80719610 80719620 80719640 80719650 90719660 80719690 80719700 80719700 80719700 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF 0E60 0 C028 0E61 0 D35E 0E62 0 C343 0E63 0 D35D 0E64 0 D370 0E65 0 C027 0E66 0 D367 DE67 D C2DA 0E68 0 D368 0E69 0 C34F 0E6A 0 D202 0E68 0 C123 0E6C 0 F201 | # F06X2 DC | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720280 0720280 0720310 0720310 0720310 0720310 0720310 0720340 0720360 0720360 0720370 0720380 0720380 0720380 0720380 0720410 0720410 0720420 0720430 0720440 |
| 0E28 0 7001 0E29 0 C124 0E2A 0 D119 0E2B 0 4311 0E2C 0 4335 0E2D 0 C342 0E2E 0 D20F 0E2F 0 C119 0E30 0 D001 | * 8 WORDS PER RECORD ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719520 80719540 80719550 80719550 80719570 80719580 80719590 80719620 80719620 80719640 80719650 80719660 80719670 80719670 80719720 80719730 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF 0E60 0 C028 0E61 0 D35E 0E62 0 C343 0E63 0 D35D 0E64 0 D370 0E65 0 C027 0E66 0 D367 DE67 D C2DA 0E68 0 D368 0E69 0 C34F 0E6A 0 D202 0E68 0 C123 | # F06X2 DC | 0720200 0720210 0720220 0720230 0720250 0720250 0720260 0720280 0720280 0720280 0720310 0720310 0720330 0720330 0720340 0720350 0720350 0720360 0720380 0720380 0720380 0720380 0720380 0720380 0720380 0720380 |
| 0E28 0 7001 0E29 0 C124 0E2A 0 D119 0E2B 0 4311 0E2C 0 4335 0E2D 0 C342 0E2E 0 D20F 0E2F 0 C119 0E30 0 D001 0E31 0 6700 0000 | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719520 80719540 80719550 80719550 80719570 80719590 80719590 80719610 80719620 80719640 80719650 90719660 80719690 80719700 80719700 80719700 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF 0E60 0 C028 0E61 0 D35E 0E62 0 C343 0E63 0 D35D 0E64 0 D370 0E65 0 C027 0E66 0 D367 DE67 D C2DA 0E68 0 D368 0E69 0 C34F 0E6A 0 D202 0E68 0 C123 0E6C 0 F201 | # F06X2 DC | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720280 0720290 0720310 0720310 0720320 0720330 0720330 0720340 0720360 0720360 0720370 0720380 0720380 0720380 0720380 0720380 0720410 0720410 0720440 |
| 0E28 0 7001 0E29 0 C124 0E2A 0 D119 0E2B 0 4311 0E2C 0 4335 0E2D 0 C342 0E2E 0 D20F 0E2F 0 C119 0E30 0 D001 0E31 0 6700 0000 | * 8 WORDS PER RECORD * ALL ZERO PATTERN * *** *** *** *** *** *** *** *** *** | 80719510 80719520 80719520 80719540 80719550 80719550 80719570 80719590 80719590 80719610 80719620 80719640 80719650 90719660 80719690 80719700 80719700 80719700 | 0E5C 0 A943 0E5D 0 4332 0E5E 0 432F 0E5F 0 FFFF 0E60 0 C028 0E61 0 D35E 0E62 0 C343 0E63 0 D35D 0E64 0 D370 0E65 0 C027 0E66 0 D367 DE67 D C2DA 0E68 0 D368 0E69 0 C34F 0E6A 0 D202 0E68 0 C123 0E6C 0 F201 | # F06X2 DC | 0720200 0720210 0720220 0720230 0720240 0720250 0720260 0720280 0720290 0720310 0720310 0720320 0720330 0720330 0720340 0720360 0720360 0720370 0720380 0720380 0720380 0720380 0720380 0720410 0720410 0720440 |

PROG ID 0807-1

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PAGE

DATE

EC NO.

28FE866 01JUL66 15MAY67 14NOV69 30JAN70

415120 415178 411731 431319 431319A

DATE EC NO. 2400 FUNCTION TEST

| 0E6E 0 0B02 | X10 3 2 | ISSUE WRITE | 80720460 | _ | 0E9D 0 C345 | LD 3 69 GET WC#40I4WC#20 | 80721140 |
|----------------------------|----------------------|---------------------------|----------------------|-------------|---------------------------------|---|----------------------|
| 0E6F 0 4375 | F0780 BSI 3 117 | BUSY CK SRC | _ | | 0E9E 0 D35D | STO 3 93 SET IN I/O AREA | 80721150 |
| | * | | 80720480 | | 0E9F 0 C344 | LD 3 68 GET WC # 20 STO 2 15 SET IN DST | 80721160 80721170 |
| | ± 11 | NTERRUPT RETURN | 80720490 | ~ | 0EAO 0 D20F 0EAI 0 4D80 001A | BSC II 26 EXIT SX | 80721180 |
| 0E70 0 4351 | F07IR BSI 3 81 | GD RELEASE DEVICE SRC | 80720500 80720510 | | CENT O 4DOC COIN | * *** *** *** *** *** *** *** *** *** | 80721190 |
| 0E71 0 C20A | LD 2 10 | GET RECORD COUNT | 80720520 | _ | | * | 80721200 |
| 0E72 0 8124 | A 1 36 | ADD DNE | 80720530 | _ | | * ROUTINE NUMBER 8 | 80721210 |
| 0E73 0 D20A | STO 2 10 | SAVE | 80720540 | | | * COMMAND REJECT TEST | 80721220 |
| | * | 5 | 80720550 | _ | | * ISSUE CDMMAND TO BUSY DR | 80721230 |
| | * C1 | (RESULTS | 80720560 | | | * | 80721240 |
| | * | | 80720570 | | | * *** *** *** *** *** *** *** *** *** *** | 80721250 |
| 0E74 0 C219 | F07AB LO 2 25 | GET SENSE WD | 80720580 | - | 0EA3 0 4332 | FORMA BSI 3 50 GO TD SET UP RTN 1 SRC | 80721260 |
| 0E75 0 1003 | SLA 3 | IS END TBL ON | 80720590 | | 0EA4 0 C123 | LD 1 35 GET WRT FNC & MDD | 80721270 |
| 0E76 0 4808 | BSC & | _ | 80720600 | | 0EA5 0 F201 | EOR 2 1 SET AREA CODE | 80721280 |
| 0E77 0 7003 | MDX FOTAE | YES | 80720610 | | 0EA6 0 D305 0EA7 0 Clo3 | STO 35 SET IOCC LD 13 GET ERA MOO & FNC | 80721290 80721300 |
| 0E78 0 430B | FO7AO BSI 3 II | GO TO PRINT VIA MER SRC | | | 0EA8 0 F201 | EOR 2 1 SET AREA CODE | 80721310 |
| 0E79 0 E008 0E7A 0 0002 | DC /E008 DC /0002 | ID 08 Line 0 - FDRM 2 | 80720630 80720640 | | 0EA9 0 D307 | STO 3 7 SET IOCC | 80721320 |
| 0E7B 0 C208 | F07AE LD 2 8 | GET SENSE WD | 80720650 | | OEAA O C34F | LD 3 79 GET 0100 | 80721330 |
| 0E7C 0 1806 | SRA 6 | IS OP COMPLETE ON | 80720660 | | 0EAB 0 D202 | STD 2 2 SET FNC # 1 | 80721340 |
| 0E7D 0 4804 | BSC E | ag or compete or | 80720670 | | OEAC O OBO4 | XIO 3 4 ISSUE CDMMAND | 80721350 |
| 0E7E 0 7003 | MDX FO7AG | YES | 80720680 | | OEAD O ABOO | D 3 0 DELAY 42 TD 82 MICSE | 80721360 |
| 0E7F 0 430B | F07AF 8SI 3 I1 | GO TO PRINT VIA MER SRC | | | 0EAE 0 0B06 | XIO 3 6 ISSUE COMMAND | 80721370 |
| 0E80 0 E009 | DC / E009 | ID 09 | 80720700 | | 0EAF 0 4375 | FO8BO BSI 3 117 BUSY CK SRC | 80721380 |
| 0E81 0 0002 | DC /0002 | LINE O - FORM 2 | 80720710 | | | * | 80721390 |
| 0E82 0 C00B | FO7AG LO FO7X7 | GET 16 | 80720720 | | | * SPECIAL INTRP RETURN | 80721400 |
| 0E83 0 D20F | STO 2 15 | SET AS WD CT | 80720730 | - | 0580 0 (251 | FOOTD DCT 2 01 CO DELEASE DEVICE SDC | 80721410 |
| 0E84 0 432F | BSI 3 47 | GO SET I/O AREA SRO | | | 0EB0 0 4351 0EBI 0 C208 | FOBIR BSI 3 81 GO RELEASE DEVICE SRC LD 2 8 GET SENSE WD | 80721420 80721430 |
| 0E85 0 0000 | DC 0 | 00 045450465 505 | 80720750 | | 0EB2 0 1002 | SLA 2 | 80721440 |
| 0E86 0 430E | BSI 3 14 LD F07X2 | GD BACKSPACE SRC | | | 0EB3 1 4C28 0EBC | BSC L FOBAC,Z& | 80721450 |
| 0E87 0 COO7 0E88 0 D216 | LD F07X2 STO 2 22 | GET PATTERN Set in DST | 80720770 80720780 | | 0EB5 0 C219 | FORAD LD 2 25 GET SPEC SENSE WD | 80721460 |
| 0E89 0 4314 | BSI 3 20 | GO READ SRC | 80720790 | | 0EB6 0 1002 | SLA 2 | 80721470 |
| 0E8A 0 0002 | DC 2 | SO KEND SKC | 80720800 | | 0EB7 1 4C28 0EBC | BSC L FOBAC, Z& BRANCH = CMNO REJ ON | 80721480 |
| 0204 0 0002 | * | | 80720810 | • | 0EB9 0 430B | BSI 3 11 PRINT VIA MER SRC | 80721490 |
| 0E8B 0 434C | BSI 3 76 | ROUTINE EXIT | 80720820 | | OEBA O EOOA | DC /E00A IO 3A | 80721500 |
| | * | | 80720830 | | 0EBB 0 0002 | DC /0002 LINE 0 - FORM 2 | 80721510 |
| | * C(| DNSTANTS | 80720840 | | OEBC 0 1010 | FOBAC SLA 16 CLEAR A REG | 80721520 |
| | * | | 80720850 | | 0EBD 0 D219 | STO 2 25 ZERO SP SENSE WD | 80721530 |
| 0E8C 0 4008 | F07X1 DC /4008 | WC - 8 & NO EOT | 80720860 | | OEBE 0 434C | BSI 3 76 ROUTINE EXIT | 80721540 |
| 0E80 0 8008 | F07X4 OC /8008 | WC -8 & CHAIN & EOT | 80720870 | | | * *** *** *** *** *** *** *** *** *** *** | 80721550 |
| 0E8E 0 0010 | F07X7 DC 16 | WC # 16 | 80720880 | | | * * ROUTINE NUMBER 9 | 80721560 80721570 |
| | * *** *** *** *** | * *** *** *** *** *** | 80720890 | | | * COMMAND REJECT TEST | 80721580 |
| | * | DMMON SET UP ROUTINE 1 | 80720900 80720910 | | | * ISSUE COMMAND TO WRONG OR | 80721590 |
| | * | DAMON SET OF ROUTINE I | 80720920 | | | * | 80721600 |
| | * *** *** *** *** | * *** *** *** *** *** | 80720930 | • | | * *** *** *** *** *** *** *** *** *** | 80721610 |
| 0E8F 0 C332 | COMOE LD 3 50 | GET RETURN SE | 80720940 | | 0EBF 0 4332 | FO9AA BSI 3 50 GO TO SET UP RTN 1 SRC | 80721620 |
| 0E90 0 D11A | STO 1 26 | SAVE | 80720950 | | 0EC0 0 C11B | LD 1 27 GET SENSE FNC & MDO | 80721630 |
| 0E91 0 4329 | BS I 3 41 | CK DR FDR AVAIL SRO | | | 0EC1 0 F201 | EOR 2 1 SET AREA CODE | 80721640 |
| 0E92 0 4326 | BSI 3 38 | GD CK DR FDR BUSY SRC | | | OEC2 0 D305 | STO 3 5 SET IOCC | 80721650 |
| 0E93 0 C124 | LD I 36 | | 80720980 | | 0EC3 0 C103 | LD I 3 GET ERA FNC & MDD | 80721660 |
| 0E94 0 D21A | STO 2 26 | SET DR BUSY | 80720990 | | 0EC4 0 F201 | EOR 2 I SET AREA CODE | 80721670 |
| 0E95 0 4354 | BSI 3 84 | GD REQUEST DEVICE SRO | | | 0EC5 0 D307 0EC6 0 C350 | STO 3 7 SET IDCC LD 3 80 GET 0200 | 80721680 80721690 |
| 0E96 0 7003 | MDX COMO2 | * *** *** *** *** *** | 80721010 | | OEC7 0 D202 | STO 2 2 SET FNC # 2 | 80721700 |
| | * *** *** *** *** | * *** *** *** *** *** *** | 80721020 80721030 | | 0EC8 0 0B04 | XIO 3 4 ISSUE COMMANO | 80721710 |
| | * | OMMON SET UP ROUTINE 2 | 80721040 | | OEC9 O ABOO | 0 3 0 DELAY 42 TO 82 MICSE | 80721720 |
| | | SHICK SET OF ROUTINE 2 | 80721050 | | OECA O OBO4 | XIO 3 4 ISSUE COMMAND | 80721730 |
| | * *** *** *** ** | * *** *** *** *** *** | 80721060 | | OECB O ABOO | D 3 0 OELAY 42 TO 82 MICSE | 80721740 |
| 0E97 0 C335 | COM1E LO 3 53 | GET RETURN SE | 80721070 | | OECC O OBO6 | XIO 3 6 ISSUE COMMANO | 80721750 |
| 0E98 0 D11A | STO I 26 | SAVE | 80721080 | | 0ECD 0 4375 | BSI 3 I17 BUSY CK SRC | 80721760 |
| | | * *** *** *** *** *** | 80721090 | | | * *** *** *** *** *** *** *** *** *** | 80721770 |
| OE99 0 4326 | BSI 3 38 | GO CK DR FOR BUSY SRO | | | | * | 80721780 |
| 0E9A 0 4329 | COM02 BSI 3 41 | GO CK FOR AVAIL SRO | | | | * ROUTINE NUMBER IO | 80721790 |
| 0E9B 0 C124 | LO I 36 | | 80721120 | | | * COMMANO REJECT TEST | 80721800 |
| 0E9C 0 D21B | STO 2 27 | SET DR NOT AVAIL | 80721130 | | | * BACKSPACE INTO LOAD POINT | 80721810 |
| | | | | | | | |
| | | | | | | | |
| 28FEB66 01JUL66 | | 30JAN70 | PROG IO | 0807-1 DATE | 28FEB66 01JUL66 | | PROG IO 080 |
| 415120 415178 | 411731 431319 | 431319A | PAGE | 16 EC NO. | 415120 415178 | 411731 4313I9 4313I9A | PAGE |
| | | | | | | | |

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2400 FUNCTION TEST

PART NO. 2196370 PAGE 17 IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2400 FUNCTION TEST

PART NO. 2196370 PAGE 17A

| | * | | 80721829 | 0F00 1 4C28 0F05 | BSC | L FOEAD,+Z | BRANCH = SAV STDP DN | ı | 80722500 |
|--|--|--|--|---|--|---|--|-----------------------|--|
| | * *** *** *** *** | *** *** *** *** *** | 80721830 | 0F02 0 430B | BSI | 3 11 | PRINT VIA MER | SRC | 80722510 |
| OECE 0 4311 | FOAAA BSI 3 17 | GD REWIND SRC | 80721840 | 0F03 0 E00C | DC | /E00C | 10 3C | J | 80722520 |
| 0ECF 0 4335 | BSI 3 53 | GO TO SET UP RTN 2 SRC | 80721850 | 0F04 0 0002 | DC | /0002 | LINE 0 - FORM 2 | | 80722530 |
| OEDO O 4317 | BSI 3 23 | GO WRITE SRC | 80721860 | 0F05 0 6314 | FOEAD LDX | 3 20 | | | 80722540 |
| OED1 0 430E | BS I 3 14 | GD BACKSPACE SRC | 80721870 | 0F06 1 C7C0 09D1 | FOEAE LD | L3 IDA | GET PRDTECTED WORD | | 80722550 |
| 0ED2 0 4326 | BSI 3 38 | CK DR FDR BUSY SRC | 80721880 | 0F08 0 4820 | BSC | Z | WAS WD DESTROYED | | 80722560 |
| 0ED3 0 430E | BSI 3 14 | GD BACK SPACE SRC | 80721890 | 0F09 0 7010 | MDX | FOEAL | YES | | |
| 0ED4 0 C20A | LD 2 10 | GET REC ND | 80721990 | 0F0A 0 73FF | MOX | 3 -1 | DECR IX 3 | | 80722570 |
| OED5 0 8124 | A 1 36 | ADD DNE | | OFOB O 70FA | MDX | FOEAE | DECK IX 3 | | 80722580 |
| 0ED6 0 D20A | STD 2 10 | SAVE | 80721910 | 0F0C 0 6314 | FOEAF LDX | 3 20 | | | 80722590 |
| 0ED7 0 70D8 | MDX FO8IR | | 80721920 | 0F00 0 2F40 | FOEAM DC | | CL 540 CTD0405 | | 80722690 |
| 020. 0 1000 | | GD CK RESULT *** *** *** *** *** | 80721930 | 0F0E 1 09D1 | | /2F40 | CLEAR STDRAGE PRTCT | | 80722610 |
| | * | *** *** *** *** *** | 80721940 | | DC | IDA | | | 80722620 |
| | * | | 80721950 | 0F0F 0 73FF | MDX | 3 -1 | DECR IX 3 | | 80722630 |
| | | JTINE NUMBER 11 | 80721960 | 0F10 0 70FC | MDX | FOEAM | LDDP | | 80722640 |
| | | MMAND REJECT TEST | 80721970 | 0F11 0 412E | BSI | 1 46 | SET IX 3 | SRC | 80722650 |
| | | NIND AT LOAD PDINT | 80721980 | 0F12 0 C208 | LD | 2 8 | GET SENSE WORD | | 80722660 |
| | * | | 80721990 | 0F13 0 1804 | SR A | 4 | | | 80722670 |
| | | *** *** *** *** *** | 80722000 | 0F14 0 4804 | BSC | E | IS WRDNG LENGTH REC | | 80722680 |
| 0ED8 0 4311 | FOBAA BSI 3 17 | GD REWIND SRC | 80722010 | 0F15 0 7003 | MDX | FOEAK | YES | | 80722690 |
| 0ED9 0 43 32 | BSI 3 50 | GD TD SET UP RTN 1 SRC | 80722020 | 0F16 0 430B | BSI | 3 11 | GD TD PRINT VIA MER | SRC | 80722700 |
| 0EDA 0 C 350 | LD 3 80 | GET 0200 | 80722030 | 0F17 0 E00B | DC | /E00B | ID OB | | 80722710 |
| OEDB O D202 | STD 22 | SET FNC TD 2 | 80722040 | 0F18 0 0002 | DC | /0002 | LINE 0 - FDRM 2 | | 80722720 |
| OEDC O Clob | LD 111 | GET RWD FNC & MDD | 80722050 | 0F19 0 434C | FOEAK BSI | 3 76 | RDUTINE EXIT | | 80722730 |
| 0EDD 0 F201 | EDR 2 1 | SET AREA CDDE | 80722060 | | * | | | | 80722740 |
| 0EDE 0 D305 | STD 35 | SET IOCC | 807 220 70 | OF1A 1 C700 09D1 | FOEAL LD | L3 IDA | GET DESTROYED WD | | 80722750 |
| 0EDF 0 0B04 | XID 34 | ISSUE COMMAND | 90722080 | 0F1C 0 D205 | STD | 2 5 | SET IN DST | | 80722760 |
| 0EE0 0 4375 | FOBAB BSI 3 117 | BUSY CK SRC | 80722090 | 0F1D 0 1010 | SLA | 16 | ZERD ACCUM | | |
| | | *** *** *** *** | 80722100 | OF1E 0 D206 | STD | 2 6 | SET IN DST | | 80722770 |
| | * | | 80722110 | 0F1F 0 412E | BSI | 1 46 | SET IX 3 | 505 | 80722780 |
| | * 801 | JTINE NUMBER 12 | 80722110 | 0F20 0 430B | BSI | 3 11 | | SRC | 80722790 |
| | | DRAGE PROTECT TEST | 80722120 | 0F21 0 E00D | DC | /E00D | GD TD PRINT VIA MER | SKC | 80722800 |
| | * | SKAGE PROTECT TEST | | 0F22 0 0007 | DC | | ID OD | | 80722810 |
| | * *** *** *** *** | *** *** *** *** *** | 80722140 | 0F23 0 70E8 | MDX | /0007 | LINE 0 - FDRM 7 | | 80722820 |
| OEE1 1 C400 OB13 | | | 80722150 | 0123 0 1028 | | FOEAF | ** *** *** *** *** | | 80722830 |
| | FOCAA LD L TERM&5 | GET DNLINE IND | 80722160 | | T TTT TFT | ተቀተ ትቶች ተቶች ች | ** *** *** *** *** | * | 80722840 |
| | DCT T CVIT 70 | DVDACC OTH TE DIM THE | | | _ | | | | |
| 0EE3 1 44AB 09C0 | BSI I EXIT,ZE | BYPASS RTN IF DNLINE | 80722170 | | * | | | | 80722850 |
| | * | | 80722170 80722180 | | * | RDUT | INE NUMBER 13 | | |
| 0EE5 0 4335 | * BSI 3 53 | GD TD SETUP RTN 2 SRC | 80722170 80722180 80722190 | | * * * | RDUT | | | 80722850 |
| 0EE5 0 4335 0EE6 0 432F | * BSI 3 53 BSI 3 47 | | 80722170 80722180 80722190 80722200 | | * * * | RDUT PRDGI | INE NUMBER 13 RAM STDP TEST | | 80722850 80722860 |
| 0EE5 0 4335 0EE6 0 432F 0EE7 0 FFFF | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF | GD TD SETUP RTN 2 SRC GO SET I/O AREA SRC | 80722170 80722180 80722190 80722200 80722210 | | * * * * * * * | RDUT PRDG! *** *** *** * | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** | | 80722850 80722860 80722870 |
| 0EE5 0 4335 0EE6 0 432F 0EE7 0 FFFF 0EE8 0 4317 | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 | GD TD SETUP RTN 2 SRC GO SET I/O AREA SRC GD WRITE SRC | 80722170 80722180 80722190 80722200 | 0F24 0 4335 | * * * * * * * * * * * * * * * * * * * | RDUT PRDG1 *** *** *** *: 3 53 | INE NUMBER 13 RAM STDP TEST | | 80722850 80722860 80722870 80722880 |
| 0EE5 0 4335 0EE6 0 432F 0EE7 0 FFFF 0EE8 0 4317 0EE9 0 430E | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 | GD TD SETUP RTN 2 SRC GO SET I/O AREA SRC GD WRITE SRC GD BACKSPACE SRC | 80722170 80722180 80722190 80722200 80722210 | 0F25 0 4317 | * * * * * * * * * * * * * * * * * * * | RDUT PRDGI *** *** *** *: 3 53 3 23 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** | * | 80722850 80722860 80722870 80722880 80722890 80722900 |
| OEE5 0 4335 OEE6 0 432F OEE7 0 FFFF OEE8 0 4317 OEE9 0 430E OEEA 0 4326 | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 | GD TD SETUP RTN 2 SRC GD SET I/O AREA SRC GD WRITE SRC GD BACKSPACE SRC CK DR FDR BUSY SRC | 80722170 80722180 80722190 80722200 80722210 80722220 | 0F25 0 4317 0F26 0 430E | * * * * FODAA BSI BSI BSI | RDUT PRDG(*** *** *** *: 3 53 3 23 3 14 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** GD TD SET UP RTN 2 | * SRC | 80722850 80722860 80722870 80722880 80722890 80722900 80722910 |
| OEE5 0 4335 OEE6 0 432F OEE7 0 FFFF OEE8 0 4317 OEE9 0 430E OEEA 0 4326 OEEB 0 C124 | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 | GD TD SETUP RTN 2 SRC GO SET I/O AREA SRC GD WRITE SRC GD BACKSPACE SRC | 80722170 80722180 80722190 80722200 80722210 80722220 80722230 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 | * * * * * * * * * * * * * * * * * * * | RDUT PRDGI *** *** *** *: 3 53 3 23 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE | * SRC SRC | 80722850 80722860 80722879 80722880 80722890 80722910 80722910 80722920 |
| OEE5 O 4335 OEE6 O 432F OEE7 O FFFF OEE8 O 4317 OEE9 O 430E OEEA O 4326 OEEB O C124 OEEC O D21A | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 | GD TD SETUP RTN 2 SRC GD SET I/O AREA SRC GD WRITE SRC GD BACKSPACE SRC CK DR FDR BUSY SRC | 80722170 80722180 80722190 80722200 80722210 80722220 80722220 80722230 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 | * * * * FODAA BSI BSI BSI | RDUT PRDG(*** *** *** *: 3 53 3 23 3 14 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE | * SRC SRC SRC | 80722850 80722860 80722870 80722880 80722890 80722900 80722910 80722920 80722930 |
| OEE5 0 4335 OEE6 0 432F OEE7 0 FFFF OEE8 0 4317 OEE9 0 430E OEEA 0 4326 OEEB 0 C124 | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 | GD TD SETUP RTN 2 SRC GD SET I/O AREA SRC GD WRITE SRC GD BACKSPACE SRC CK DR FDR BUSY SRC GET DNE | 80722170 80722180 80722190 80722200 80722210 80722220 80722230 80722230 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 | * * * * * * *** *** FODAA BSI BSI BSI BSI | RDUT PRDGG *** *** *** *: 3 53 3 23 3 23 3 14 3 38 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE | * SRC SRC SRC | 80722850 80722860 80722870 80722880 80722890 80722990 80722910 80722920 80722930 80722940 |
| OEE5 O 4335 OEE6 O 432F OEE7 O FFFF OEE8 O 4317 OEE9 O 430E OEEA O 4326 OEEB O C124 OEEC O D21A | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 | GD TD SETUP RTN 2 SRC GO SET I/O AREA SRC GD WRITE SRC GD BACKSPACE SRC CK DR FDR BUSY SRC GET DNE SET IN DR BUSY SW | 80722170 80722180 80722190 80722200 80722210 80722220 80722230 80722240 80722250 80722250 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 | * * * * * * * * * * * * * * * * * * * | *** *** *** *: 3 53 3 23 3 14 3 38 1 36 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW | * SRC SRC SRC SRC | 80722850 80722860 80722870 80722880 80722890 80722910 80722910 80722920 80722930 80722940 80722950 |
| OEE5 0 4335 OEE6 0 432F OEE7 0 FFFF OEE8 0 4317 OEE9 0 430E OEEA 0 4326 OEEB 0 C124 OEEC 0 D21A OEED 0 4354 | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 BSI 3 84 | GD TD SETUP RTN 2 SRC GO SET I/O AREA SRC GD WRITE SRC GD BACKSPACE SRC CK DR FDR BUSY SRC GET DNE SET IN DR BUSY SW GD REQUEST DEVICE SPC | 80722170 80722180 80722190 80722200 80722210 80722220 80722230 80722240 80722250 80722250 80722260 80722270 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 0F29 0 D21A | * * * * * * * * * * * * * * * * * * * | RDUT PRDGI *** *** *** *: 3 53 3 23 3 14 3 38 1 36 2 26 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW REQ DEVICE | * SRC SRC SRC | 80722850 80722860 80722870 80722880 80722990 80722910 80722920 80722920 80722940 80722940 80722950 80722960 |
| OEE5 0 4335 OEE6 0 432F OEE7 0 FFFF OEE8 0 4317 OEE9 0 430E OEEA 0 4326 OEEB 0 C124 OEEC 0 D21A OEED 0 4354 OEEE 0 432F | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 BSI 3 84 BSI 3 47 | GD TD SETUP RTN 2 SRC GO SET I/O AREA SRC GD WRITE SRC GD BACKSPACE SRC CK DR FDR BUSY SRC GET DNE SET IN DR BUSY SW GD REQUEST DEVICE SPC | 80722170 80722180 80722190 80722200 80722210 80722220 80722230 80722240 80722250 80722250 80722270 80722270 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 0F29 0 D21A 0F2A 0 4354 | * * * * * * * * * * * * * * * * * * * | RDUT PRDGI *** *** *** *: 3 53 3 23 3 14 3 38 1 36 2 26 3 84 3 80 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW REQ DEVICE GET 9200 | * SRC SRC SRC SRC | 80722850 80722860 80722870 80722880 80722890 80722910 80722920 80722920 80722930 80722940 80722950 80722960 80722970 |
| OEE5 0 4335 OEE6 0 432F OEE7 0 FFFF OEE8 0 4317 OEE9 0 430E OEEA 0 4326 OEEB 0 C124 OEEC 0 D21A OEEC 0 4354 OEEE 0 432F OEEF 0 0000 | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 BSI 3 84 BSI 3 47 DC 0 | GD TD SETUP RTN 2 SRC GO SET I/O AREA SRC GD WRITE SRC GD BACKSPACE SRC CK DR FDR BUSY SRC GET DNE SET IN DR BUSY SW GD REQUEST DEVICE SPC | 80722170 80722180 80722190 80722200 80722210 80722220 80722230 80722240 80722250 80722260 80722270 80722270 80722280 80722280 80722290 80722300 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 0F29 0 D21A 0F2A 0 4354 0F2B 0 C350 | * * * * * * * * * * * * * * * * * * * | RDUT PRDGI *** *** *** *: 3 53 3 23 3 14 3 38 1 36 2 26 3 84 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW REQ DEVICE GET 9200 SET FNC # 2 | * SRC SRC SRC SRC | 80722850 80722860 80722870 80722890 80722990 8072290 80722920 80722930 80722940 80722950 80722960 80722970 80722970 |
| OEE5 O 4335 OEE6 O 432F OEE7 O FFFF OEE8 O 4317 OEE9 O 430E OEEA O 4326 OEEB O C124 OEEC O D21A OEED O 4354 OEED O 432F OEEF O 0000 OEFO O 6314 | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 BSI 3 84 BSI 3 47 DC 0 LDX 3 20 | GD TD SETUP RTN 2 GD SET I/O AREA GD WRITE GD BACKSPACE CK DR FDR BUSY GET DNE SET IN DR BUSY SW GD REQUEST DEVICE GD SET I/D AREA SRC SRC SRC SRC SRC SRC SRC SRC SRC S | 80722170 80722180 80722190 80722200 80722210 80722220 80722230 80722240 80722250 80722250 80722260 80722270 80722270 80722280 80722290 80722310 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 0F29 0 D21A 0F2A 0 4354 0F2B 0 C350 0F2C 0 D202 | * * * * * * * * * * * * * * * * * * * | *** *** *** ** 3 53 3 23 3 14 3 38 1 36 2 26 3 84 3 80 2 2 1 34 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW REQ DEVICE GET 7200 SET FNC # 2 GET RD FNC & MOD | * SRC SRC SRC SRC | 80722850 80722860 80722870 80722880 80722990 80722910 80722930 80722930 80722950 80722950 80722950 80722960 80722970 80722970 |
| OEE5 O 4335 OEE6 O 432F OEE7 O FFFF OEE8 O 4317 OEE9 O 430E OEEA O 4326 OEEB O C124 OEEC O D21A OEED O 4354 OEEE O 432F OEEF O 0000 OEFO O 6314 OEF1 O 2F41 | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 BSI 3 84 BSI 3 47 DC 0 LDX 3 20 FOEAC DC /2F41 DC IDA | GD TD SETUP RTN 2 SRC GO SET I/O AREA SRC GD WRITE SRC GD BACKSPACE SRC CK DR FDR BUSY SRC GET DNE SET IN DR BUSY SW GD REQUEST DEVICE SPC GD SET I/D AREA SRC STDRAGE PRDTECT I/D | 80722170 80722180 80722190 80722200 80722210 80722220 80722230 80722240 80722250 80722260 80722270 80722270 80722270 80722300 80722310 90722320 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 0F29 0 D21A 0F2A 0 4354 0F2B 0 C350 0F2C 0 D202 0F2C 0 C122 | * * * * * * * * * * * * * * * * * * * | *** *** *** ** 3 53 3 23 3 14 3 38 1 36 2 26 3 84 3 80 2 2 1 34 2 1 | ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW REQ DEVICE GET 0200 SET FNC # 2 GET RD FNC & MOD SET AREA CDDE | * SRC SRC SRC SRC | 80722850 80722860 80722870 80722880 80722990 80722910 80722920 80722930 80722930 80722950 80722960 80722970 80722970 80722970 80722990 |
| OEE5 0 4335 OEE6 0 432F OEE7 0 FFFF OEE8 0 4317 OEE9 0 430E OEEA 0 4326 OEEB 0 C124 OEEC 0 D21A OEED 0 4354 OEEE 0 432F OEEF 0 0000 OEF0 0 6314 OEF1 0 2F41 OEF2 1 09D1 OEF3 0 73FF | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 BSI 3 84 BSI 3 47 DC 0 LDX 3 20 FOEAC DC /2F41 DC IDA MDX 3 -1 | GD TD SETUP RTN 2 SRC GD SET I/O AREA SRC GD WRITE SRC GD BACKSPACE SRC CK DR FDR BUSY SRC GET DNE SET IN DR BUSY SW GD REQUEST DEVICE SPC GD SET I/D AREA SRC STDRAGE PROTECT I/D DECR IX 3 | 80722170 80722180 80722190 80722200 80722210 80722220 80722230 80722240 80722250 80722250 80722270 80722270 80722270 80722300 80722300 80722310 80722330 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 0F29 0 D21A 0F2A 0 4354 0F2B 0 C350 0F2C 0 D202 0F2C 0 D202 0F2C 0 F2C1 0F2F 0 F2C1 0F2F 0 D305 | * * * * * *** *** FODAA BSI BSI BSI LD STD BSI LD STD LD STD EDR STD | RDUT PRDGI *** *** *** ** 3 53 3 23 3 14 3 38 1 36 2 26 3 84 3 80 2 2 1 34 2 1 3 5 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW REQ DEVICE GET 2200 SET FNC # 2 GET RD FNC & MOD SET AREA CDDE SET IDCC | * SRC SRC SRC SRC | 80722850 80722860 80722870 80722880 80722990 80722910 80722920 80722930 80722940 80722950 80722970 80722970 80722970 80722970 80722990 80722990 80722990 |
| OEE5 0 4335 OEE6 0 432F OEE7 0 FFFF OEE8 0 4317 OEE9 0 430E OEEA 0 4326 OEEB O C124 OEEC 0 D21A OEEC 0 4354 OEEE 0 432F OEEF 0 0000 OEF0 0 6314 OEF1 0 2F41 OEF1 0 2F41 OEF3 0 73FF OEF4 0 70FC | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 BSI 3 84 BSI 3 47 DC 0 LDX 3 20 FOEAC DC /2F41 DC IDA MDX 3 -1 MDX FOEAC | GD TD SETUP RTN 2 SRC GD SET I/O AREA SRC GD WRITE SRC GD BACKSPACE SRC CK DR FDR BUSY SRC GET DNE SET IN DR BUSY SW GD REQUEST DEVICE SPC GD SET I/D AREA SRC STDPAGE PROTECT I/D DECR IX 3 LDDP | 80722170 80722180 80722190 80722200 80722210 80722220 80722230 80722240 80722250 80722260 80722270 80722270 80722270 80722300 80722300 80722310 80722330 80722330 80722330 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 0F29 0 D21A 0F2A 0 4354 0F2B 0 C350 0F2C 0 D202 0F2C 0 D202 0F2C 0 C122 0F2E 0 C122 0F2F 0 D305 0F30 0 C11C | * * * * * *** *** FODAA BSI BSI BSI LD STD BSI LD STD LD EDR STD LD | RDUT PRDGI *** *** *** *: 3 53 3 23 3 14 3 38 1 36 2 26 3 84 3 80 2 2 1 34 2 1 3 5 1 28 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW REQ DEVICE GET 0200 SET FNC # 2 GET RD FNC & MOD SET AREA CDDE SET IDCC GET PRDG STDP FNC & MD | * SRC SRC SRC SRC | 80722850 80722860 80722870 80722880 80722990 80722910 80722920 80722930 80722940 80722950 80722970 80722970 80722970 80722970 80722970 8072293000 80723000 80723010 80723020 |
| OEE5 O 4335 OEE6 O 432F OEE7 O FFFF OEE8 O 4317 OEE9 O 430E OEEA O 4326 OEEB O C124 OEEC O D21A OEED O 4354 OEEE O 432F OEEF O 0000 OEFO O 6314 OEF1 O 2F41 OEF2 1 O9D1 OEF3 O 73FF OEF4 O 70FC OEF5 O 412E | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 BSI 3 84 BSI 3 47 DC 0 LDX 3 20 FOEAC DC /2F41 DC IDA MDX 3 -1 MDX FOEAC BSI 1 46 | GD TD SETUP RTN 2 GD SET I/O AREA GD WRITE GD BACKSPACE CK DR FDR BUSY GET DNE SET IN DR BUSY SW GD REQUEST DEVICE GD SET I/D AREA STDRAGE PROTECT I/D DECR IX 3 LDDP SET IX 3 SRC | 80722170 80722180 80722190 80722200 80722210 80722220 80722230 80722240 80722250 80722260 80722270 80722270 80722280 807222300 807223300 80722310 80722330 80722330 80722330 80722330 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 0F29 0 D21A 0F2A 0 4354 0F2B 0 C350 0F2C 0 D202 0F2C 0 D202 0F2C 0 F201 0F2F 0 D305 0F30 0 C11C 0F31 0 F201 | * * * * * **** *** FODAA BSI BSI BSI LD STD BSI LD STD LD EDR STD LD EDR | RDUT PRDGI *** *** *** *: 3 53 3 23 3 14 3 38 1 36 2 26 3 84 3 80 2 2 1 34 2 1 3 5 1 28 2 1 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW REQ DEVICE GET 0200 SET FNC # 2 GET RD FNC & MOD SET AREA CDDE SET IDCC GET PROG STDP FNC &MD SET AREA CDDE | * SRC SRC SRC SRC | 80722850 80722860 80722870 80722890 80722900 80722910 80722920 80722930 80722940 80722950 80722970 80722970 80722970 80722970 80723010 80723010 80723010 80723010 |
| OEE5 O 4335 OEE6 O 432F OEE7 O FFFF OEE8 O 4317 OEE9 O 430E OEEA O 4326 OEEB O C124 OEEC O D21A OEED O 4354 OEEE O 432F OEEF O 0000 OEFO O 6314 OEF1 O 2F41 OEF2 1 O9D1 OEF3 O 73FF OEF4 O 73FF OEF4 O 73FF OEF5 O 412E OEF6 O C350 | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 BSI 3 84 BSI 3 47 DC 0 LDX 3 20 FOEAC DC /2F41 DC IDA MDX 3 -1 MDX 50EAC BSI 1 46 LD 3 80 | GD TD SETUP RTN 2 GD SET I/O AREA GD WRITE GD BACKSPACE CK DR FDR BUSY GET DNE SET IN DR BUSY SW GD REQUEST DEVICE GD SET I/D AREA STDRAGE PROTECT I/D DECR IX 3 LDDP SET IX 3 GET 0200 | 80722170 80722180 80722190 80722200 80722210 80722220 80722230 80722240 80722250 80722260 80722270 80722270 80722280 80722300 807223300 807223300 807223300 807223300 80722340 80722350 80722360 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 0F29 0 D21A 0F2A 0 4354 0F2B 0 C350 0F2C 0 D202 0F2C 0 D202 0F2C 0 F2O1 0F2F 0 F2O1 0F2F 0 D305 0F30 0 C11C 0F31 0 F2O1 0F32 0 D307 | * * * * * *** *** FODAA BSI BSI BSI LD STD BSI LD STD LD EDR STD LD EDR STD LD EDR STD | RDUT PRDG1 *** *** *** ** 3 53 3 23 3 14 3 38 1 36 2 26 3 84 3 80 2 26 1 34 2 1 3 5 1 28 2 1 3 7 | ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW REQ DEVICE GET 2000 SET FNC # 2 GET RD FNC & MOD SET AREA CDDE SET IDCC GET PRO STDP FNC&MD SET AREA CD DE SET AREA CD DE SET AREA CD DE SET IDCC SET AREA CD DE SET IDCC | * SRC SRC SRC SRC | 80722850 80722860 80722870 80722880 80722990 80722910 80722930 80722930 80722950 80722950 80722960 80722960 80722970 80722970 80723000 807230300 80723030 80723030 80723030 |
| OEE5 0 4335 OEE6 0 432F OEE7 0 FFFF OEE8 0 4317 OEE9 0 430E OEEA 0 4326 OEEB 0 C124 OEEC 0 D21A OEED 0 4354 OEEE 0 432F OEEF 0 0000 OEF0 0 6314 OEF1 0 2F41 OEF2 1 09D1 OEF3 0 73FF OEF4 0 70FC OEF5 0 412E OEF6 0 C350 OEF7 0 D202 | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 BSI 3 84 BSI 3 47 DC 0 LDX 3 20 FOEAC DC /2F41 DC IDA MDX 3 -1 MDX FOEAC BSI 1 46 LD 3 80 STO 2 2 | GD TD SETUP RTN 2 SRC GO SET I/O AREA SRC GD WRITE SRC GD BACKSPACE SRC CK DR FDR BUSY SRC GET DNE SET IN DR BUSY SW GD REQUEST DEVICE SPC GD SET I/D AREA SRC STDRAGE PROTECT I/D DECR IX 3 LDDP SET IX 3 SRC GET 0200 SET FNC TD 2 | 80722170 80722180 80722190 80722200 80722210 80722230 80722240 80722250 80722260 80722270 80722270 80722280 80722300 80722300 80722310 80722310 80722330 80722330 80722370 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 0F29 0 D21A 0F2B 0 C350 0F2C 0 D202 0F2C 0 D202 0F2C 0 F201 0F2F 0 D305 0F30 0 C11C 0F31 0 F201 0F32 0 D307 0F33 0 C01E | * * * * * *** *** FODAA BSI BSI BSI BSI LD STD BSI LD STD LD EDR STD LD EDR STD LD EDR STD LD | RDUT PRDG1 *** *** *** ** 3 53 3 23 3 14 3 38 1 36 2 26 3 84 3 80 2 2 1 34 2 1 3 5 1 28 2 1 3 7 FOFX1 | ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW REQ DEVICE GET 0200 SET FNC # 2 GET RD FNC & MOD SET AREA CDDE SET IDCC GET PROG STDP FNC&MD SET AREA CD DE SET IDCC GET WD CT # 16383 | * SRC SRC SRC SRC | 80722850 80722860 80722870 80722880 80722990 80722910 80722930 80722930 80722950 80722960 80722960 80722960 80722960 80722970 80722980 80723010 80723030 80723030 80723030 |
| OEE5 0 4335 OEE6 0 432F OEE7 0 FFFF OEE8 0 4317 OEE9 0 430E OEEA 0 4326 OEEB 0 C124 OEEC 0 D21A OEED 0 4354 OEEE 0 432F OEEF 0 0000 OEF0 0 6314 OEF1 0 2F41 OEF2 1 09D1 OEF3 0 73FF OEF4 0 70FC OEF5 0 412E OEF6 0 C350 OEF7 0 D202 OEF8 0 C122 | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 BSI 3 84 BSI 3 47 DC 0 LDX 3 20 FOEAC DC /2F41 DC IDA MDX 3 -1 MDX FOEAC BSI 1 46 LD 3 80 STO 2 2 LD 1 34 | GD TD SETUP RTN 2 GD SET I/O AREA GD SET I/O AREA GD WRITE GD BACKSPACE CK DR FDR BUSY GET DNE SET IN DR BUSY SW GD REQUEST DEVICE GD SET I/D AREA STDRAGE PROTECT I/D DECR IX 3 LDDP SET IX 3 GET 0200 SET FNC TD 2 GET READ MOD & FNC | 80722170 80722180 80722190 80722200 80722210 80722220 80722230 80722240 80722250 80722250 80722270 80722270 80722270 80722230 80722310 80722310 80722330 80722330 80722330 80722330 80722330 80722340 80722350 80722350 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 0F29 0 D21A 0F2A 0 4354 0F2B 0 C350 0F2C 0 D202 0F2D 0 C122 0F2E 0 F201 0F2F 0 D305 0F30 0 C11C 0F31 0 F201 0F32 0 D307 0F33 0 C01E 0F34 0 D35D | * * * * * *** *** FODAA BSI BSI BSI LD STD BSI LD STD LD EDR STD | RDUT PRDGI *** *** *** ** 3 53 3 23 3 14 3 38 1 36 2 26 3 84 3 80 2 2 1 34 2 1 3 5 1 28 2 1 3 7 FOFX1 3 93 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW REQ DEVICE GET 7200 SET FNC # 2 GET RD FNC & MOD SET AREA CDDE SET IDCC GET PROG STDP FNC&MD SET AREA CDDE SET IDCC GET WD CT # 16383 SET IN I/D AREA | * SRC SRC SRC SRC | 80722850 80722860 80722870 80722880 80722990 80722910 80722920 80722930 80722950 80722960 80722970 80722970 80722970 80722970 80722970 8072290 80723030 80723030 80723050 80723050 80723050 80723050 |
| OEE5 O 4335 OEE6 O 432F OEE7 O FFFF OEE8 O 4317 OEE9 O 430E OEEA O 4326 OEEB O C124 OEEC O D21A OEED O 4354 OEEE O 432F OEEF O 0000 OEFO O 6314 OEF1 O 2F41 OEF2 1 09D1 OEF3 O 73FF OEF4 O 70FC OEF5 O 412E OEF6 O C350 OEF7 O D202 OEF8 O C122 OEF9 O F201 | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 BSI 3 84 BSI 3 47 DC 0 LDX 3 20 FOEAC DC /2F41 DC IDA MDX 3 -1 MDX FOEAC BSI 1 46 LD 3 80 STD 2 2 LD 1 34 EDR 2 1 | GD TD SETUP RTN 2 GD SET I/O AREA GD WRITE GD BACKSPACE CK DR FDR BUSY GET DNE SET IN DR BUSY SW GD REQUEST DEVICE GD SET I/D AREA STDPAGE PROTECT I/D DECR IX 3 LDDP SET IX 3 GET 0200 SET FNC TD 2 GET READ MOD & FNC SET AREA CDDE | 80722170 80722180 80722190 80722200 80722210 80722220 80722240 80722250 80722260 80722270 80722270 80722290 80722300 80722300 80722310 80722330 80722330 80722330 80722330 80722340 80722350 80722350 80722370 80722370 80722370 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 0F29 0 D21A 0F2A 0 4354 0F2B 0 C350 0F2C 0 D202 0F2C 0 D202 0F2D 0 C122 0F2D 0 C201 0F2F 0 D305 0F30 0 C11C 0F31 0 F201 0F32 0 D307 0F33 0 C01E 0F34 0 D35D 0F35 0 C10D | * * * * * *** *** FODAA BSI BSI BSI LD STD BSI LD STD LD EDR | RDUT PRDGI *** *** *** *: 3 53 3 23 3 14 3 38 1 36 2 26 3 84 3 80 2 2 1 34 2 1 3 5 1 28 2 1 3 7 FOFX1 3 93 1 13 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW REQ DEVICE GET 9200 SET FNC # 2 GET RD FNC & MOD SET AREA CDDE SET IDCC GET PROG STDP FNC &MD SET AREA CDDE SET IDCC GET WD CT # 16383 SET IN I/D AREA GET SENSE FNC & MOD | * SRC SRC SRC SRC | 80722850 80722860 80722880 80722890 80722900 80722910 80722920 80722920 80722940 80722960 80722970 80722970 80722970 80722970 80723010 80723020 80723030 80723050 80723050 80723050 80723050 80723050 |
| OEE5 O 4335 OEE6 O 432F OEE7 O FFFF OEE8 O 4317 OEE9 O 430E OEEA O 4326 OEEB O C124 OEEC O D21A OEEC O 4354 OEEE O 4354 OEEF O 0000 OEFO O 6314 OEF1 O 2F41 OEF2 1 O9D1 OEF3 O 73FF OEF4 O 70FC OEF5 O 412E OEF6 O C350 OEF7 O D202 OEF8 O F201 OEFA O D305 | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 BSI 3 84 BSI 3 47 DC 0 LDX 3 20 FOEAC DC /2F41 DC IDA MDX 3 -1 MDX FOEAC BSI 1 46 LD 3 80 STO 2 2 LD 1 34 EDR 2 1 STD 3 5 | GD TD SETUP RTN 2 GD SET I/O AREA GD WRITE GD BACKSPACE CK DR FDR BUSY GET DNE SET IN DR BUSY SW GD REQUEST DEVICE GD SET I/D AREA STDRAGE PROTECT I/D DECR IX 3 LDDP SET IX 3 GET 0200 SET FNC TD 2 GET READ MOD & FNC SET AREA CDDE SET IDCC | 80722170 80722180 80722190 80722200 80722210 80722220 80722230 80722240 80722250 80722260 80722270 80722280 80722270 80722300 80722300 80722300 80722330 80722330 80722330 80722330 80722340 80722350 80722350 80722350 80722360 80722360 80722370 80722380 80722380 80722380 80722380 80722380 80722380 80722380 80722380 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 0F29 0 D21A 0F2A 0 4354 0F2B 0 C350 0F2C 0 D202 0F2D 0 C122 0F2E 0 F201 0F2F 0 D305 0F30 0 C11C 0F31 0 F201 0F32 0 D307 0F33 0 C01E 0F34 0 D35D 0F36 0 F201 | * * * * * *** *** FODAA BSI BSI BSI BSI LD STD BSI LD STD LD EDR STD LD EDR STD LD EDR STD LO EDR | RDUT PRDGI *** *** *** *: 3 53 3 23 3 14 3 38 1 36 2 26 3 84 3 80 2 2 1 34 2 1 3 5 1 28 2 1 3 7 FOFX1 3 93 1 13 2 1 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW REQ DEVICE GET 9200 SET FNC # 2 GET RD FNC & MOD SET AREA CDDE SET IDCC GET PROG STDP FNC &MD SET AREA CD DE SET IDCC GET HOCC GET SENSE FNC & MOD SET AREA CDOE | * SRC SRC SRC SRC | 80722850 80722860 80722870 80722880 80722990 80722910 80722920 80722930 80722940 80722970 80722970 80722970 80722970 80722970 80723010 80723010 80723010 80723050 80723050 80723050 |
| OEE5 O 4335 OEE6 O 432F OEE7 O FFFF OEE8 O 4317 OEE9 O 430E OEEA O 4326 OEEB O C124 OEEC O D21A OEED O 4354 OEEE O 432F OEEF O 0000 OEFO O 6314 OEF1 O 2F41 OEF2 1 09D1 OEF3 O 73FF OEF4 O 70FC OEF5 O 412E OEF6 O C350 OEF7 O D202 OEF8 O C122 OEF9 O F201 OEFA O D305 OEFB O OB04 | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 BSI 3 84 BSI 3 47 DC 0 LDX 3 20 FOEAC DC /2F41 DC IDA MDX 3 -1 MDX FOEAC BSI 1 46 LD 3 80 STO 2 2 LD 1 34 EDR 2 1 STD 3 5 XID 3 4 | GD TD SETUP RTN 2 GD SET I/O AREA GD SET I/O AREA GD WRITE GD BACKSPACE CK DR FDR BUSY GET DNE SET IN DR BUSY SW GD REQUEST DEVICE GD SET I/D AREA STDRAGE PROTECT I/D DECR IX 3 LDDP SET IX 3 GET 0200 SET FNC TD 2 GET READ MOD & FNC SET AREA CDDE SET IDCC ISSUE CDMMAND | 80722170 80722180 80722190 80722200 80722210 80722220 80722230 80722240 80722250 80722260 80722270 80722280 80722300 80722300 80722310 80722310 807223300 807223300 807223300 80722340 80722350 80722350 80722350 80722350 80722350 80722350 80722350 80722350 80722350 80722350 80722350 80722350 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 0F29 0 D21A 0F2A 0 4354 0F2B 0 C350 0F2C 0 D202 0F2D 0 C122 0F2E 0 F201 0F2F 0 D305 0F30 0 C11C 0F31 0 F201 0F32 0 D307 0F33 0 C01E 0F34 0 D35D 0F35 0 C10D 0F36 0 F201 0F37 0 F01D | * * * * * *** *** FODAA BSI BSI BSI LD STD BSI LD EDR STD LO EDR | RDUT PRDG1 *** *** *** ** 3 53 3 23 3 14 3 38 1 36 2 26 3 84 3 80 2 26 1 34 2 1 3 5 1 28 2 1 3 7 FOFX1 3 93 1 13 2 1 FOFX4 | ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW REQ DEVICE GET 0200 SET FNC # 2 GET RD FNC & MOD SET AREA CDDE SET IDCC GET PROB STDP FNC & MOD SET AREA CDDE SET IDCC GET HD CT # 16383 SET IN I/D AREA GET SENSE FNC & MOD SET AREA CDDE SET IN I/D AREA GET SENSE FNC & MOD SET AREA CDDE SET HO CT # 16383 | * SRC SRC SRC SRC | 80722850 80722860 80722870 80722880 80722990 80722910 80722930 80722930 80722950 80722950 80722960 80722970 80722970 80722980 80722970 80723030 80723030 80723030 80723030 80723030 80723050 80723070 80723070 80723070 |
| OEE5 O 4335 OEE6 O 432F OEE7 O FFFF OEE8 O 4317 OEE9 O 430E OEEA O 4326 OEEB O C124 OEEC O D21A OEEC O 4354 OEEE O 4354 OEEF O 0000 OEFO O 6314 OEF1 O 2F41 OEF2 1 O9D1 OEF3 O 73FF OEF4 O 70FC OEF5 O 412E OEF6 O C350 OEF7 O D202 OEF8 O F201 OEFA O D305 | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 BSI 3 84 BSI 3 47 DC 0 LDX 3 20 FOEAC DC /2F41 DC IDA MDX 3 -1 MDX FOEAC BSI 1 46 LD 3 80 STO 2 2 LD 1 34 EDR 2 1 STD 3 5 | GD TD SETUP RTN 2 GD SET I/O AREA GD WRITE GD BACKSPACE CK DR FDR BUSY GET DNE SET IN DR BUSY SW GD REQUEST DEVICE GD SET I/D AREA STDRAGE PROTECT I/D DECR IX 3 LDDP SET IX 3 GET 0200 SET FNC TD 2 GET READ MOD & FNC SET AREA CDDE SET IDCC | 80722170 80722180 80722190 80722200 80722210 80722220 80722240 80722250 80722260 80722270 80722280 80722270 80722300 80722310 80722310 80722310 80722310 80722320 80722320 80722320 80722320 80722320 80722320 80722320 80722320 80722320 80722320 80722320 80722320 80722340 80722350 80722370 80722380 80722380 80722380 80722380 807223400 807224400 807224410 807224420 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 0F29 0 D21A 0F2A 0 4354 0F2B 0 C350 0F2C 0 D202 0F2D 0 C122 0F2E 0 F201 0F2F 0 D305 0F30 0 C11C 0F31 0 F201 0F32 0 D307 0F33 0 C01E 0F34 0 D35D 0F35 0 C10D 0F36 0 F201 0F37 0 F01D 0F38 0 D303 | * * * * * *** *** FODAA BSI BSI BSI LD STD BSI LD STD LD EDR STD LD EDR STD LD EDR STD LO EDR STD LO STD LO STD LO STD LO STD STD LO STD LO STD STD LO STD | RDUT PRDG1 *** *** *** *** ** 3 53 3 23 3 14 3 38 1 36 2 26 3 84 3 80 2 2 1 34 2 1 3 5 1 28 2 1 3 7 FOFX1 3 93 1 13 2 1 FOFX4 3 3 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW REQ DEVICE GET 0200 SET FNC # 2 GET RD FNC & MOD SET AREA CDDE SET IDCC GET PROG STDP FNC & MOD SET AREA CDDE SET IDCC GET WD CT # 16383 SET IN I/D AREA GET SENSE FNC & MOD SET AREA CDOE SET AREA CDOE SET AREA CDOE SET HD CT # 16383 SET IN I/D AREA GET SENSE FNC & MOD SET AREA CDOE SET HD CT # 16383 SET IN I/D AREA GET SENSE FNC & MOD SET AREA CDOE SET HD CTR BIT SET IDCC | * SRC SRC SRC SRC | 80722850 80722860 80722870 80722880 80722990 80722910 80722930 80722930 80722950 80722950 80722960 80722970 80722960 80722970 80722970 80723030 80723030 80723030 80723030 80723030 80723030 80723030 80723030 80723030 80723030 80723030 80723030 80723030 |
| OEE5 O 4335 OEE6 O 432F OEE7 O FFFF OEE8 O 4317 OEE9 O 430E OEEA O 4326 OEEB O C124 OEEC O D21A OEED O 4354 OEEE O 432F OEEF O 0000 OEFO O 6314 OEF1 O 2F41 OEF2 1 09D1 OEF3 O 73FF OEF4 O 70FC OEF5 O 412E OEF6 O C350 OEF7 O D202 OEF8 O C122 OEF9 O F201 OEFA O D305 OEFB O OB04 | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 BSI 3 84 BSI 3 47 DC 0 LDX 3 20 FOEAC DC /2F41 DC IDA MDX 3 -1 MDX FOEAC BSI 1 46 LD 3 80 STO 2 2 LD 1 34 EDR 2 1 STD 3 5 XID 3 4 | GD TD SETUP RTN 2 GD SET I/O AREA GD SET I/O AREA GD WRITE GD BACKSPACE CK DR FDR BUSY GET DNE SET IN DR BUSY SW GD REQUEST DEVICE GD SET I/D AREA STDRAGE PROTECT I/D DECR IX 3 LDDP SET IX 3 GET 0200 SET FNC TD 2 GET READ MOD & FNC SET AREA CDDE SET IDCC ISSUE CDMMAND | 80722170 80722180 80722200 80722210 80722210 80722230 80722240 80722250 80722260 80722270 80722280 80722270 80722300 80722310 80722310 80722330 80722330 80722330 80722340 80722350 80722340 80722340 80722340 80722340 80722340 80722340 80722340 80722340 80722340 80722340 80722340 80722340 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 0F29 0 D21A 0F2A 0 4354 0F2B 0 C350 0F2C 0 D202 0F2D 0 C122 0F2D 0 C1122 0F2E 0 F201 0F3F 0 D305 0F30 0 C11C 0F31 0 F201 0F32 0 D307 0F33 0 C01E 0F34 0 D35D 0F35 0 C10D 0F36 0 F201 0F37 0 F01D 0F38 0 D303 0F39 0 0B04 | * * * * * *** *** FODAA BSI BSI BSI BSI LD STD BSI LD STD LD EDR | RDUT PRDGI *** *** *** *** ** 3 53 3 23 3 14 3 38 1 36 2 26 3 84 3 80 2 2 1 34 2 1 3 5 1 28 2 1 3 7 FOFX1 3 93 1 13 2 1 FOFX4 3 3 3 4 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW REQ DEVICE GET 0200 SET FNC # 2 GET RD FNC & MOD SET AREA CDDE SET IDCC GET PROG STDP FNC &MD SET AREA CDDE SET IDCC GET WD CT # 16383 SET IN I/D AREA GET SENSE FNC & MOD SET AREA CDOE SET HD CT # 16383 SET IN I/D AREA GET SENSE FNC & MOD SET AREA CDOE SET HD CT # 16383 SET IN I/D AREA GET SENSE FNC & MOD SET AREA CDOE SET HD CTR BIT SET IDCC ISSUE CDMMAND | * SRC SRC SRC SRC | 80722850 80722860 80722870 80722880 80722990 80722910 80722930 80722930 80722950 80722950 80722960 80722970 80722970 80722980 80722970 80723030 80723030 80723030 80723030 80723030 80723050 80723070 80723070 80723070 |
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| OEE5 O 4335 OEE6 O 432F OEE7 O FFFF OEE8 O 4317 OEE9 O 430E OEEA O 4326 OEEB O C124 OEEC O D21A OEED O 4354 OEEE O 432F OEEF O 0000 OEFO O 6314 OEF1 O 2F41 OEF2 1 09D1 OEF3 O 73FF OEF4 O 70FC OEF5 O 412E OEF6 O C350 OEF7 O D202 OEF8 O C122 OEF9 O F201 OEFA O D305 OEFB O OB04 OEFC O 4351 | * BSI 3 53 BSI 3 47 FOEAB DC /FFFF BSI 3 23 BSI 3 14 BSI 3 38 LD 1 36 STD 2 26 BSI 3 84 BSI 3 47 DC 0 LDX 3 20 FOEAC DC /2F41 DC IDA MDX 3 -1 MDX FOEAC BSI 1 46 LD 3 80 STO 2 2 LD 1 34 EDR 2 1 STD 3 5 XID 3 4 FOEAH BSI 3 117 * * FOEIR BSI 3 81 | GD TD SETUP RTN 2 GO SET I/O AREA GD WRITE GD BACKSPACE CK DR FDR BUSY GET DNE SET IN DR BUSY SW GD REQUEST DEVICE GD SET I/D AREA STDRAGE PROTECT I/D DECR IX 3 LDDP SET IX 3 GET 0200 SET FNC TD 2 GET READ MOD & FNC SET AREA CDDE SET IDCC ISSUE CDMMAND BUSY CK GD RELEASE DEVICE SRC GO RELEASE DEVICE SRC | 80722170 80722180 80722200 80722210 80722220 80722230 80722240 80722250 80722260 80722270 80722280 80722230 80722310 80722310 80722310 80722310 80722320 80722330 80722340 80722350 80722350 80722350 80722350 80722360 | 0F25 0 4317 0F26 0 430E 0F27 0 4326 0F28 0 C124 0F29 0 D21A 0F2A 0 4354 0F2B 0 C350 0F2C 0 D202 0F2C 0 F201 0F2F 0 D305 0F30 0 C11C 0F31 0 F201 0F32 0 D307 0F33 0 C01E 0F34 0 D35D 0F35 0 C10D 0F36 0 F201 0F37 0 F01D 0F38 0 D303 0F39 0 0B04 0F38 0 0B02 0F3B 0 D017 | * * * * * * * * * * * * * | RDUT PRDG1 *** *** *** *** ** 3 53 3 23 3 14 3 38 1 36 2 26 3 84 3 80 2 2 1 34 2 1 3 5 1 28 2 1 3 7 FOFX1 3 93 1 13 2 1 FOFX4 3 3 3 4 3 2 FOFX2 3 6 | INE NUMBER 13 RAM STDP TEST ** *** *** *** *** *** GD TD SET UP RTN 2 GD WRITE GD BACKSPACE GD CK FDR BSY GET DNE SET DR BUSY SW REQ DEVICE GET 9200 SET FNC # 2 GET RD FNC & MOD SET AREA CDDE SET IDCC GET PROG STDP FNC &MD SET AREA CDDE SET IDCC GET WD CT # 16383 SET IN I/D AREA GET SENSE FNC & MOD SET AREA CDDE SET IDC &MOD SET AREA CDDE SET IDC C GET WD CT # 16383 SET IN I/D AREA GET SENSE FNC & MOD SET AREA CDOE SET HO CT # 16383 SET IN I/D AREA GET SENSE FNC & MOD SET AREA CDOE SET HO CT # 16383 SET IN I/D AREA GET SENSE FNC & MOD SET AREA CDOE SET HO CTR BIT SET IDCC ISSUE CDMMAND SENSE WD CTR SAVE | * SRC SRC SRC SRC | 80722850 80722860 80722880 80722890 80722990 80722910 80722920 80722920 80722940 80722970 80722960 80722970 80722960 80722970 80723010 80723030 80723030 80723030 80723030 80723030 80723030 80723050 80723050 80723050 80723050 80723050 80723050 80723050 80723050 80723050 80723110 80723110 80723120 80723110 |
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2400 FUNCTION TEST

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2400 FUNCTION TEST

0F3F 0 C208 LD 28 GET SENSE WD 80723180 GO RELEASE DEVICE 0F73 0 4351 FIOIR BSI 3 81 0F40 0 1804 SRA 80723190 0F74 0 C208 LD 28 GET SENSE WD 0F41 0 4804 IS WRONG LNGTH REC BSC 80723200 0F75 0 1804 SRA FOFAR 0F42 0 7003 MDX 80723210 IS WRONG LNGTH REC B SC 0F76 0 4804 3 11 OF43 0 4308 BSI GO TO PRINT VIA MER SRC 80723220 0F77 0 7003 MDX F10AC YES 0F44 0 E00E DC /E00E 10 OE 80723230 GO TO PRINT VIA MER SRC 0F45 0 0000 LINE O-FORM O 0F78 0 430B BSI 3 11 DC /0000 80723240 0F79 0 E00F DC /FOOF ID OF 0F46 0 C00C FOFAB LD F0FX2 GET WD CTR 80723250 LINE 0 - FORM 2 OF7A 0 0002 DC. /0002 0F47 0 F00C **EOR** FOFX3 80723260 OF7B 0 C129 F10AC LD 1 41 GET RTN SW WAS WD CTR CORRECT 0F48 0 4818 BSC. £.— 80723270 F10AC&3 SAVE 0F7C 0 D001 STD 0F49 0 434C FOFAD BSI 3 76 YES ROUTINE EXIT 80723280 IX 3 # RTN SW LDX L3 0 0F70 0 6700 0000 0F4A 0 C009 F0FX3 GET WD CT EXPECTED 80723290 GET WO CT 0F7F 0 C205 LD 25 0F48 0 D206 STD SET IN DST 80723300 2 6 0F80 1 F700 0F8D EOR L3 F10X2 IS IT # EXPECTED F0FX2 0F4C 0 C006 LD GET WO CT REC 80723310 8RANCH= WD CT CRCT BSC L F10AD,+-OF82 1 4C18 OF88 0F4D 0 D205 STO 25 SET IN DST 80723320 GET EXPCTED WD CT LD L3 F10X2 0F84 1 C700 0F80 0F4F 0 430R BSI 3 11 GO TO PRINT VIA MER SRC 80723330 0F86 0 D206 STO 26 SAVE 0F4F 0 E015 DC 80723340 /E015 ID 15 RESTORE IX 3 0F87 0 412E BSI 1 46 LINE O FORM 6 0F50 0 0006 00 / 0006 80723350 3 11 PRINT VIA MER 0F88 0 4308 BSI 0F51 0 70F7 MDX FOFAO 80723360 0F89 0 E010 DC /E010 ID 10 80723370 LINE 0 - FORM 6 / 0006 DC CDNSTANTS 80723380 OF8A 0 0006 SET IX 3 F10AD 8SI 0F8B 0 412E 1 46 80723390 RDUTINE EXIT 3 76 FOFX1 DC WD COUNT 80723400 OF8C 0 434C BSI 0F52 0 3FFF 16383 TEMP STORAGE 0F53 0 0000 80723410 FOFX2 DC 0 CONSTANTS /0000 EXPECTED WO CT 0F54 0 C000 FOFX3 DC 80723420 0F55 0 0010 FOFX4 DC /0010 SNSE WD CTR BIT 80723430 RTN 14 EXPECTED WO OF8D O FFFE F10X2 OC /FFFE * *** *** *** *** *** *** *** *** *** 80723440 0E8E 0 0001 / 00 01 RTN 17 EXPECTED WD 80723450 DC F10X3 OC RTN SW 0F8F 0 0000 0 RDUTINE 17 80723460 ADD CONSTANT 0F90 0 8124 F10X4 A 1 36 80723470 SUB CONSTANT * *** *** *** *** *** *** *** *** *** 0F91 0 9124 F10X5 S 1 36 80723480 * *** *** *** *** *** *** *** *** *** *** GET ONE 0F56 0 C124 F11AA LO 1 36 80723490 0F57 0 7001 MUX F1080 80723500 ROUTINE NUMBER 15 * *** *** *** *** *** *** *** *** *** 80723510 WRT AND RD TAPE MARK TEST 80723520 RDUTINE NUMBER 14 80723530 * *** *** *** *** *** *** *** *** *** WRDNG LENGTH RECORD TEST 80723540 GD TD SET UP RTN 2 SRC 0F92 0 4335 FOFAA BSI 3 53 READ 1 MDRE WORD THAN WRTN 80723550 GO WRITE TAPE MARK SRC 0F93 0 431A BSI 3 26 80723560 GD BACKSPACE 0F94 0 430E BSI 3 14 * *** *** *** *** *** *** *** *** *** 80723570 0F95 0 4314 GD READ 851 3 20 ZERD ACCUM 80723580 0F58 0 1010 FOEAA SLA 16 0F96 0 0000 0F59 0 D129 F10B0 STO SAVE RTN SW 80723590 DC 0 2 4 GET TH SW GO TO SET UP RTN 2 80723600 0F97 0 C204 I D SRC OF5A 0 4335 BSI 3 53 WAS TH READ 0F98 D 4820 BSC DE58 0 4317 128 3 23 GO WRITE SRC 80723610 SRC 0F99 0 7003 MDX F11AB YES GD BACKSPACE 80723620 OF5C 0 430E 851 3 14 GD TO PRINT VIA MER SRC OF9A 0 430B BSI 3 11 SRC DF5D 0 4326 BSI 3 38 CK DR FOR BUSY 80723630 0F9B 0 E011 DC /E011 ID 11 OF5E 0 C124 LD GET DNE 80723640 1 36 LINE 0 -FORM 2 0F9C 0 0002 /0002 STD SET IN DR BUSY SW 80723650 DC 0F5F 0 D21A 2 26 GET TM DATA F11AB LD 3 94 0F90 0 C35F 0F60 0 4354 8 S I GO REQUEST DEVICE SRC 80723660 CK AGAINST EXPECTED 1 41 GET RTN SW 80723670 0F9E 0 F110 EOR 1 29 0F61 0 C129 LD BRANCH = CORRECT OF9F 1 4C18 OFA8 BSC L F11AC++-F1081&1 80723680 STO SAVE DF62 0 0001 GET TM DATA IX 3 # RTN SW 80723690 OFA1 0 C35E LD 3 94 0F63 0 6700 0000 F1081 LDX L3 0 OFA2 0 D205 STO SAVE L3 F10X4 GET ADO OR SUB 25 80723700 0F65 1 C700 0F90 LD GET EXPECTED TH DATA 1 29 SET **OFA3 0 C11D** LD 0F67 0 D002 STO F 10AF 80723710 OFA4 0 D206 STO 26 SAVE 1 46 SRC OF68 0 412E BSI LO IX 3 80723720 PRINT VIA MER GET WC#4014WC#20 OFA5 0 430B BST 3 11 80723730 0F69 0 C345 LO OFA6 0 E012 /E012 ID 12 DC. 80723740 OF6A 0 8124 F10AF A 1 36 ADO OR SUB IINE 0 - FORM 7 SET IN I/O AREA OFA7 0 0007 DC /0007 STO 80723750 0F68 0 D35D 3 93 ROUTINE EXIT F11AC BSI 3 76 OFA8 0 434C 80723760 OF6C 0 C350 LD 3 80 GET 0200 SET FNC # 2 80723770 0F6D 0 D202 STO 22 GET READ MOD & FNC * *** *** *** *** *** *** *** *** *** 80723780 OF6E 0 C122 LD 1 34 EOR SET AREA CODE 80723790 0F6F 0 F201 2 1 RDUTINE NUMBER 16 0F70 0 D305 STO 35 SET IOCC 80723800 SEVEN TRACK FEATURE TEST OIX ISSUE COMMAND 80723810 OF71 0 0804 F10AB BSI 3 117 80723820 BUSY CK OF72 0 4375 1. WRITE-BACKSPACE AND 80723830 READ AT 556 BPI.2 BYTES 80723840 PER WORD AND DDD PARITY 80723850

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2400 FUNCTION TEST

| | * * 2. 1 | √RITE - BACKSPACE AND | 80 72 455 0 80 7 2 456 0 | | * |
|--------------|----------------------|-------------------------------------|-----------------------------|------------------|-----------------|
| | | AT 556 BPI,2 SYTES | 80724570 | | * |
| | | ORD AND EVEN PARITY | | 0FCF 0 C122 | LD 1 |
| | * | TORD AND EVEN PARTIT | 80724580 | 0FD0 0 F346 | EOR 3 |
| | * 3 L | RITE-BACKSPACE AND | 80724590 80734400 | 0F01 0 D122 | STO 1 |
| | _ | | 80724600 | 0FD2 0 C123 | LD 1 |
| | | AT 556 BPI,3 BYTES | 90724610 90724620 | 0FD3 0 F346 | EOR 3 |
| | * PEK 1 | ORD AND ODD PARITY | 80724620 | 0FD4 0 D123 | STO 1 |
| | * | IDITE BACKSDAGE AND | 80724630 | 0F05 0 70DF | MDX |
| | | VRITE-BACKSPACE AND | 80724640 | OPO O TODE | * |
| | | AT 556 BPI,3 BYTES | 80724650 | 0FD6 0 430E | F12AF BSI 3 |
| | * PEK 1 | VORD AND EVEN PARITY | 80724660 | 0FD7 0 4326 | 8SI 3 |
| | * - | ACKEDACE AND DEAD AT | 80724670 | 0F0B 0 C124 | |
| | | BACKSPACE AND READ AT | 80724680 | 0F09 0 D21A | LD 1 STO 2 |
| | | BPI.3 BYTES PER WORD EVEN PARITY | 80724690 | 0FDA 0 4354 | BSI 3 |
| | ± ± | YEN PARITY | 80724700 | 0FDB 0 C120 | LD 1 |
| | * 4 1 | WRITE-BACKSPACE AND | 90724710 90724720 | 0FDC 0 D122 | STO 1 |
| | | AT 200 BPI, 3 BYTES | 80724720 80724730 | 0FDO 0 F201 | EOR 2 |
| | | VORD AND EVEN PARITY | 80724730 80724740 | 0F0E 0 D305 | STO 3 |
| | * | TORD AND LYEN PARTIT | 90724750 | 0FDF 0 C350 | LD 3 |
| | * *** *** *** *** ** | ** *** *** *** | | 0FE0 0 D202 | STO 2 |
| 0FA9 0 4335 | FIOAA BSI 3 53 | GO TO SET UP RTN 2 SRC | 90724760 80724770 | 0FE1 0 0B04 | XIO 3 |
| OFAA 0 C200 | LD 2 0 | GET NUMBER TRACKS | 80724770 | 0FE2 0 4375 | BSI 3 |
| OFAB 0 4818 | BSC +- | IS THIS A 7 TR DR | 80724780 | 01 22 0 4319 | * |
| 31 AB 3 4019 | * | 13 11.13 W / 1K DK | 80724800 | | * |
| | * | | 80724810 | | * |
| | ± | | 80724820 | | * |
| OFAC 0 434C | F12AB BSI 3 76 | NO - ROUTINE EXIT | 30724820 30724830 | | * |
| 0FAD 0 CO02 | F12AC LD F12AG | CHANGE REC NO | 90724940 | | * |
| OFAE O D2OA | STO 2 10 | SET IN DST | 99724850 | 0FE3 0 4351 | F12IR BSI 3 |
| OFAF 0 432F | BSI 3 47 | GO SET I/O AREA SRC | 80724860 | 0FE4 0 C208 | LD 2 |
| OFBO 0 3F30 | F12AG DC /3F30 | SO SET TO AREA SEC | 80724870 | 0FE5 0 E014 | AND |
| 0FB1 0 C11E | LD 1 30 | GET FNC & MOD-WRT | 80724880 | 0FE6 1 4C18 0FEB | BSC L |
| 0FB2 0 D123 | STO 1 35 | SET WRT FNC & MOD | 80724890 | 0FE8 0 430B | BSI 3 |
| OFB3 O C11F | LD 1 31 | GET FNC & MOD -RD | 80724900 | 0FE9 0 E013 | DC |
| 0FB4 0 0122 | STO 1 34 | SET AS RD MOD & FNC | 80724910 | 0FEA 0 0002 | DC |
| OFB5 0 4317 | F12AO BSI 3 23 | GO WRITE SRC | 80724920 | 0FEB 0 C121 | F12AK LD 1 |
| 0FB6 0 430E | BSI 3 14 | GO BACKSPACE SEC | 80724930 | OFEC 0 D123 | STO 1 |
| 0FB7 0 432F | BSI 3 47 | GC SET I/O AREA SRC | 80724940 | 0FEO 0 432F | BSI 3 |
| OFBB O 0000 | OC O | SKC SKC | 80724950 | 0FEE 0 3F30 | DC |
| 0FB9 0 COF6 | LO F12AG | GET PATTERN | 80724960 | OFEF 0 4317 | BSI 3 |
| OFBA O D216 | STO 2 22 | SET IN DST | 8072497C | 0FF0 0 430E | BS1 3 |
| OFBB 0 4314 | BSI 3 20 | GO READ SRC | 80724980 | 0FF1 0 432F | BS1 3 |
| 0FBC 0 0002 | OC 2 | | 80724990 | OFF2 0 0000 | OC |
| | * | | 80725000 | 0FF3 0 4314 | BSI 3 |
| OFBO 0 C122 | LO 1 34 | GET READ MOD & FNC | 80725010 | 0FF4 0 0002 | DC |
| OFBE 0 4804 | BSC E | IS PARITY EVEN | 90725020 | | * |
| OFBF 0 7006 | MOX F12AE | YES | 80725030 | 0FF5 C C127 | LD 1 |
| OFCO 0 F124 | EOR 1 36 | SET 0001 | 80725040 | OFF6 0 D122 | S T O 1 |
| OFC1 0 D122 | STO 1 34 | SET AS RD MOO & FNC | 80725050 | OFF7 O C128 | LD 1 |
| OFC2 0 C123 | LD 1 35 | GET WRT FNC & MOD | 80725060 | OFFB 0 D123 | STO 1 |
| OFC3 O F124 | EOR 1 36 | SET 0001 | 80725070 | 0FF9 0 7082 | MDX |
| OFC4 0 D123 | STO 1 35 | SET WRT FNC & MOO | 80725080 | | * |
| OFC5 0 70EF | MOX F12AD | | 80725090 | | * |
| | * | | 80725100 | | * |
| | * SET I | PARITY ODD | 80725110 | OFFA O BOSF | PEND DC |
| | * | | 80725120 | OFFC OBD3 | ENO |
| OFC6 0 1B01 | F12AE SRA 1 | | 80725130 | NO STATEMENTS FL | AGGED IN THE AB |
| OFC7 0 1001 | SLA 1 | | 80725140 | | |
| OFC8 0 D122 | STO 1 34 | SET AS RO MOO & FNC | 80725150 | | |
| 0FC9 0 C123 | LO 1 35 | GET WRT FNC & MOD | 80725160 | | |
| OFCA 0 1801 | SR A 1 | | 80725170 | | |
| OFCB 0 1001 | SLA 1 | | 80725180 | | |
| OFCC 0 D123 | STO 1 35 | SET WRT FNC & MOD | 80725190 | | |
| OFCD 0 1802 | SRA 2 | | 80725200 | | |
| | * BSC E | | 80725210 | | |
| OFCE 0 7007 | MDX F12AF | | 80725220 | | |
| | | | | | |

| | * | | | | | 80725230 |
|---|---------------------|---|--|---|-------|--|
| | * | | SET 3 | BYTES/WD | | 80725240 |
| | * | | | | | 80725250 |
| OFCF 0 C122 | | LD 1 | 34 | GET READ MOD & FNC | | 90 725 260 |
| OFDO 0 F346 | | | 70 | SET 3 BYTES/WO | | 80725270 |
| OF01 0 D122 | | STO 1 | 34 | SET AS RD MOD & FNC | | 80725280 |
| OFD2 0 C123 | | LD 1 | 35 | GET WRT FNC & MOD | | 80725290 |
| 0FD3 0 F346 | | EOR 3 | 70 | SET 3 BYTES/WD | | 80725300 |
| OFD4 0 D123 | | STO 1 | 35 | SET WRT FNC & MOD | | 80725310 |
| 0F05 0 70DF | | MDX | F12AD | | | 80725320 |
| | * | | | | | 80725330 |
| OFD6 0 430E | F12AF | BSI 3 | 14 | GO BACKSPACE | SRC | 80725340 |
| 0FD7 0 4326 | | | 38 | CK DR FOR BUSY | SRC | 80725350 |
| OFOB 0 C124 | | | 36 | GET ONE | 30 | 80725360 |
| 0F09 0 D21A | | | 26 | SET IN OR BUSY SW | | 80725370 |
| OFDA 0 4354 | | BSI 3 | | GO REQ DEV | SRC | 80725380 |
| OFDB 0 C120 | | LD 1 | | GET FNC & MOD -RO | 3 K C | |
| OFDC 0 D122 | | | 34 | | | 80725390 |
| | | | | SET AS RO FNC & MOD | | 90725400 |
| 0FD0 0 F201 | | EOR 2 | · - | SET AREA CODE | | 90725410 |
| OFOE 0 D305 | | STO 3 | | SET IOCC | | 80725420 |
| OFDF 0 C350 | | | 80 | GET 0200 | | 80725430 |
| OFEO 0 D202 | | | 2 | SET FNC # 2 | | 80725440 |
| OFE1 0 0B04 | | | 4 | ISSUE COMMAND | | 80725450 |
| OFE2 0 4375 | | BSI 3 | 117 | BUSY CK | SRC | 80725460 |
| | * | | | | | 80725470 |
| | * | | INTER | RUPT RETURN | | 80725480 |
| | * | | | | | 80725490 |
| | * | | | | | 80725500 |
| | * | | | | | 80725510 |
| | * | | | | | 80725520 |
| OFE3 0 4351 | F12IR | BSI 3 | 81 | GO RELEASE DEVICE | SRC | 80725530 |
| 0FE4 0 C208 | | | 8 | GET SENSE WO | • • | 80725540 |
| 0FE5 0 E014 | | AND | P END | CK FOR EXPECTED | | 80725550 |
| OFE6 1 4C18 | OFFR | BSC L | F12AK,+- | BRANOH = WD OK | | 80725560 |
| OFE8 0 430B | •••• | | 11 | PRINT VIA MER | SRC | 80725570 |
| OFE9 0 E013 | | DC | /E013 | ID 13 | 31.0 | 80725580 |
| OFEA 0 0002 | | DC | /0002 | LINE 0 - FORM 2 | | 80725590 |
| OFEB 0 C121 | F12AK | _ | 33 | GET FNC & MOO-WRT | | 80725600 |
| OFEC 0 D123 | 1 12 MN | | 35 | SET WRT FNC & MOO | | |
| OFEO 0 432F | | | 47 | | cnc | 80725610 |
| | | | | GO SET I/O AREA | SRC | 80725620 |
| OFEE 0 3F30 | | DC | /3F30 | 0007=5 | | 80725630 |
| OFEF 0 4317 OFFO 0 430E | | | 23 | GO WRITE | SRC | 80725640 |
| | | | | | | 80725650 |
| - | | | 14 | GO BACKSPACE | SRC | |
| 0FF1 0 432F | | BS1 3 | 47 | GO SET I/O AREA | SRC | 80725660 |
| 0FF1 0 432F 0FF2 0 0000 | | BS1 3 | 47 0 | GO SET I/O AREA | SRC | 80 7 256 70 |
| 0FF1 0 432F 0FF2 0 0000 0FF3 0 4314 | | BS1 3 OC BSI 3 | 47 0 20 | | | |
| 0FF1 0 432F 0FF2 0 0000 | | BS1 3 | 47 0 | GO SET I/O AREA | SRC | 80 7 256 70 |
| 0FF1 0 432F 0FF2 0 0000 0FF3 0 4314 0FF4 0 0002 | * | BS1 3 OC BSI 3 DC | 47 0 20 2 | GO SET I/O AREA GO READ | SRC | 8072567 0 80725680 |
| 0FF1 0 432F 0FF2 0 0000 0FF3 0 4314 0FF4 0 0002 0FF5 0 C127 | • | BS1 3 OC BSI 3 OC | 3 47 0 20 2 39 | GO SET I/O AREA GO READ RESTORE RD FNC & MOD | SRC | 8072567 0 80725680 80725690 |
| OFF1 0 432F OFF2 0 0000 OFF3 0 4314 OFF4 0 0002 OFF5 C C127 OFF6 0 D122 | • | BS1 3 OC BSI 3 OC | 47 0 20 2 | GO SET I/O AREA GO READ | SRC | 80725670 80725680 80725690 80725700 |
| 0FF1 0 432F 0FF2 0 0000 0FF3 0 4314 0FF4 0 0002 0FF5 0 C127 | • | BS1 3 OC BSI 3 DC | 3 47 0 20 2 39 | GO SET I/O AREA GO READ RESTORE RD FNC & MOD | SRC | 80725670 80725680 80725690 90725700 80725710 |
| OFF1 0 432F OFF2 0 0000 OFF3 0 4314 OFF4 0 0002 OFF5 0 C127 OFF6 0 D122 | • | BS1 3 OC BSI 3 DC | 3 47 0 20 2 39 | GO SET I/O AREA GO READ RESTORE RD FNC & MOD SET AS RD MOD & FNC | SRC | 80725670 80725680 80725690 80725700 80725710 80725720 |
| OFF1 0 432F OFF2 0 0000 OFF3 0 4314 OFF4 0 0002 OFF5 C C127 OFF6 0 D122 OFF7 0 C128 | • | BS1 3 OC BSI 3 DC 1 STO 1 LD 1 | 3 47 0 20 2 39 34 40 | GO SET I/O AREA GO READ RESTORE RD FNC & MOD SET AS RD MOD & FNC RESTORE WT FNC & MOD | SRC | 80725670 80725680 80725690 90725700 80725710 80725720 80725730 |
| OFF1 0 432F OFF2 0 0000 OFF3 0 4314 OFF4 0 0002 OFF5 C C127 OFF6 0 D122 OFF7 0 C128 OFFB 0 D123 | • | BS1 3 OC BSI 3 DC 1 STO 1 STO 1 | 3 47 0 20 2 39 34 40 | GO SET I/O AREA GO READ RESTORE RD FNC & MOD SET AS RD MOD & FNC RESTORE WT FNC & MOD | SRC | 80725670 80725680 80725690 80725700 80725710 80725720 80725730 80725740 80725750 |
| OFF1 0 432F OFF2 0 0000 OFF3 0 4314 OFF4 0 0002 OFF5 C C127 OFF6 0 D122 OFF7 0 C128 OFFB 0 D123 | | BS1 3 OC BSI 3 DC 1 STO 1 STO 1 | 3 47 0 20 2 39 34 40 35 F12AB | GO SET I/O AREA GO READ RESTORE RD FNC & MOD SET AS RD MOD & FNC RESTORE WT FNC & MOD SET WRT FNC & MOD | SRC | 80725670 80725680 80725690 80725700 80725710 80725720 80725730 80725740 80725750 80725760 |
| OFF1 0 432F OFF2 0 0000 OFF3 0 4314 OFF4 0 0002 OFF5 C C127 OFF6 0 D122 OFF7 0 C128 OFFB 0 D123 | * | BS1 3 OC BSI 3 DC 1 STO 1 STO 1 | 3 47 0 20 2 39 34 40 | GO SET I/O AREA GO READ RESTORE RD FNC & MOD SET AS RD MOD & FNC RESTORE WT FNC & MOD SET WRT FNC & MOD | SRC | 80725670 80725680 80725690 90725710 80725710 80725720 80725730 B0725750 80725750 80725750 |
| OFF1 0 432F OFF2 0 0000 OFF3 0 4314 OFF4 0 0002 OFF5 C C127 OFF6 0 D122 OFF7 0 C128 OFFB 0 D123 OFF9 0 7082 | * * * | BS1 3 3 0 C BSI 3 0 C C C C C C C C C C C C C C C C C C | 3 47 0 20 2 39 34 40 35 F12AB | GO SET I/O AREA GO READ RESTORE RD FNC & MOD SET AS RD MOD & FNC RESTORE WT FNC & MOD SET WRT FNC & MOD ANTS | SRC | 80725670 80725680 80725690 90725700 80725710 80725720 80725730 B0725740 80725750 80725760 80725760 |
| OFF1 0 432F OFF2 0 0000 OFF3 0 4314 OFF4 0 0002 OFF5 C C127 OFF6 0 D122 OFF7 0 C128 OFFB 0 D123 OFF9 0 7082 OFFA 0 B08F | * * * PEND | BS1 3 OC BSI 3 DC 1 STO 1 LD 1 STO 1 MDX | 3 47 0 20 2 39 34 40 35 F12AB CONST | GO SET I/O AREA GO READ RESTORE RD FNC & MOD SET AS RD MOD & FNC RESTORE WT FNC & MOD SET WRT FNC & MOD | SRC | 80725670 80725680 80725690 90725700 80725710 80725720 80725730 80725740 80725760 80725760 80725760 80725770 |
| OFF1 0 432F OFF2 0 0000 OFF3 0 4314 OFF4 0 0002 OFF5 C C127 OFF6 0 D122 OFF7 0 C128 OFF8 0 D123 OFF9 0 7082 OFFA 0 B08F OFFC B08D3 | * * * PEND | BS1 3 OC BSI 3 DC LD 1 STO 1 LD 1 STO 1 DC LD 1 STO 1 DC LD 1 STO 1 MDX | 3 47 0 20 2 39 34 40 35 F12AB CONST /BOBF MTBEG | GO SET I/O AREA GO READ RESTORE RD FNC & MOD SET AS RD MOD & FNC RESTORE WT FNC & MOD SET WRT FNC & MOD ANTS EXPECTED DSW | SRC | 80725670 80725680 80725690 90725700 80725710 80725720 80725730 B0725740 80725750 80725760 80725760 |

2400 FUNCTION TEST

ACHT 08CC 0824 082D 0858 08C3 0A04 0D69 0D80 0D86 AVLX1 0C42 0C35 0C38 AVL01 OC38 OC30 OC33 AVLO2 OCZE OC40 AVLO3 OC3F OC3A BEGIN 012C 08D3 BSP 0982 8SPE 086C 0983 BSPI2 0871 088D 8SP02 086E 8SP05 0B77 8SP06 086F BSYX2 0C16 0BED 08F9 08FD 8SYX3 0C17 08F2 0C04 0C08 BSY01 08F9 08EB 8SY02 0C00 08F5 08FB 0C06 BSY03 08E9 0C19 0C18 8SY04 OBEE 8SY05 0C04 08F0 BSY07 0C03 85Y08 OCOA 08FF CKAVE OC2C 099E CKAVL 099D CK8SE 08E7 099B CKBSY 099A CKCR 0133 0C85 0087 CKDTA 0803 0AF0 0AF4 0AF7 CLTER OCF2 ODO1 0008 COMOE OE8F 09A7 COM00 09A6 COM01 09A9 COM02 0E9A 0E96 COM03 0980 COM1E 0E97 09AA CDM3E 0898 09BE CDM3F 0BA1 0889 DBINT 0892 0882 DBIN1 0899 0878 0895 DROTB 08D6 0832 0889 0C1D DRITB 0909 081D 08CO 0C25 DSTO 0939 0834 08AF 08B5 0BE9 0C1F 0C2E DST 1 0956 081F 088C 08EE 0C27 0C31 DS₩ 0994 DSWD 0888 DSWEN 0BA7 0995 DSWXO 0888 08AF 0883 0884 0888 DSWO 08AD 08B2 DSW11 0883 DSW13 OBAC OBB6 0SW8 OBA9 EDIT 0815 OD8F OD99 ODA6 ODAC EDIT1 0816 0883 EDIT2 0817 088A 012E 0A1F END EPA 080B ERA 0991 ERAB 088C ERAE OAB3 0992 ERRDR 0130 OCED 09C0 0EE3 EXIT EXITE 09AF 09C1 FNCCL 088A 0870 FNCTB 0882 084F FOAAA OECE OA52 FOSAA OEDS 0A53 FOSAB OEEO FOCAA OEE1 0A54 FODAA OF24 0A55

FOEAA OF58 OA56 FOEA8 OEE7 FOEAC OEF1 0EF4 FOEAD OFOS 0F00 FOEAE OFO6 0F 08 FOEAF OFOC OF23 FOEAH OEFC FOEAK OF19 0F15 FOEAL OF1A OF09 FOEAM OFOD 0F10 FOEIR OEFD 08A6 FOFAA 0F92 0A57 FOFA8 0F46 0F42 0F42 FOFAC OF3D FOFAD OF49 0F51 FOFIR OF3E 08A7 F0FX1 0F52 0F33 FOFX2 OF53 0F3B 0F46 0F4C F0FX3 0F54 0F47 0F4A F0FX4 0F55 0F37 FOIAA OD8B OA49 FO2AA OD8D OA4A F02A8 008E 0000 FO2AD ODCE FO2X2 ODCO 0DC8 FO3AA ODD1 0A48 F03AB ODD4 ODD2 FO4AA ODD3 OA4C FO4A8 ODE1 0DDD 00E9 FO4AC ODE8 ODE6 FO4AD OOE8 ODDF FO4AE ODD6 ODF9 F04AF 00FD 0DF7 0E11 F04AG 0E00 0E0B FO4AH OEOD OEO9 FO4AJ ODD9 0DD8 FO4AK 0E06 0E04 F04AM 0E12 F04AN 0DF4 0DF0 F04B0 0DFA 0E0C F04X2 0E13 0C56 0D08 F05AA 0E27 0A4D FO5A8 OE2A 0E28 FOGAA OE29 OA4E FO 6AB OE2C OE3E F06AC 0E42 0E3C F06AD 0E45 0E58 FOGAE OESA 0E56 FO6AF 0E3F 0E59 F06AG 0E31 0E30 F06AH 0E38 0E36 FO6AJ 0E4C 0E4B F06X2 0E58 0E33 0E4E FOTAA OESD OA4F F07A8 0E74 F07AD 0E78 F07AE 0E7B 0E77 FO7AF OE7F F07AG 0E82 0E7E F0780 0E6F F07IR 0E70 08A1 F07X1 0E8C 0E60 F07X2 0E5F 0E87 F07X4 0E8D 0E65 F07X7 0E8E 0E82 FOSAA OEA3 OA50 FORAC OEBC OEB3 OE87 F08AD 0E85

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18M MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2400 FUNCTION TEST

F0880 0EAF

PART NO. 2196370 PAGE 21 IBM MAINTENANCE DIAGNOSTIC PROGRAM FDR THE 1800 SYSTEM 2400 FUNCTION TEST

PART NO. 2196370 PAGE 214

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FO8IR 0EBO 08A2 08A3 08A5 0ED7
FO9AA OEBF 0A51
F10AA OFA9 0A58
F10AB 0F72
F10AC 0F78 0F77 0F7C
F10AD 0F8B 0F82
Floaf OF6A OF67
F1080 0F59 0F57
F10B1 0F63 0F62
F10IR 0F73 08A8 08AB
F10X2 0F8D 0F80 0F84
F10X3 0F8F
F10X4 0F90 0F65
F10X5 0F91
F11AA 0F56 0A59
Fliab OF9D OF99
F11AC OFA8 OF9F
F12A8 OFAC OFF9
F12AC OFAD
F12AD OFB5 OFC5 OFD5
F12AE OFC6 OF8F
F12AF OFD6 OFCE
F12AG OFBO OFAD OFB9
F12AK OFEB OFE6
F12IR OFE3 08AA
INTIE ODB1 09E7
INTIG 09E6 OC5D OC75 OC8A OD83 OD89
INTSW 0818 0822 0868 0D94
      09D1 0976 0978 0987 0A34 0C64 0D24 0D75 0DE3 0EF2 0F06 0F0E 0F1A
IOA
10CC1 0976
IOCC2 C978
10003
      097A OBAD
IPA
      0806
      OC18 0903
LIVO
LIVI
      OC1A 0936
LOG
      012F 0D03
LPA
      0807
MER
      097F
MERF
      OCBO OCAC OCB2 OCC2 OCC5 OCC7 OCCA OCCC
MERLO OD66 OCF1
MERL1 0D68 0981
MERXO OD52 O8EC
MERX1 0D5C 091F
MERX3 OCE4 OCB6 OCCO OCC9 OCCE OCD2
MERX4 OD20 OD1D
MERX9 0D38 0D35
MERYO OD4E OCFO OD06
MERY1 OCF5 OD50
MERY2 OCF7 OCF6
MERY4 OCED
MERY5 OD46
MER 01 OCE8
            OCF9 OD16 OD1F OD37 OD4D
MER 02 OCEF
            0CE8
MERO3 OCE5 OCD9
MERO4 OCD9
            OCE3
MER 05 OCE3
           OCD5
MERO6 ODOA
            OCDA
MER 07 0D17
            OCDB
MERO8 OD21 OCDC
MER 09 0D24 0C44 0CDD
MER1E 0C81 0980
MER10 0D19 0D23 0D27
MER11 OCD7 OCD6
MER12 OD28 OCDE
MER13 OD39 OCDF OCEO
MER14 OCB5 OCAF
MER16 ODIC OD3D
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MER17 OD3E OCE1
MER18 OD47 OCE2
MER19 0D12 0D45
MLG
      097C
MLGE OCA8
MLGXO ODO9
            0CF8
MLGO1 OCFA OCEC
MLG02 0D05 0CE9
MLG03 OCAE OC84
MLG04 0D03 0CFC
MLSCF 0809 0859 08C6 08C0 08D7 0C01
MLTER ODO7
MONAA OAIF OAI8 OA24 OA27
MONAC 0A17
MONXA 0A49
MUNX8 0A48 0A5C OCBC
MONXC 08CA 08B7 0BBE
MONOO OBAF 08B2
MONOL OALC OPFA
MON02 0A21 0A12
MON03 09EC 08C4
MON04 09FD 09F5
MON05 0A15 0A07 0A0D
MONC9 0A2D 0A44 0D67
MON10 0A3D 0A29
MON12 0A25 09FC 0A14 0A5D 0A6A
MDN16 0A28
MON17 0A2A 0A40
MON18 0A3B 0A39
MON19 0A42 0A46
MON20 0A33 0A36
MRCD 09A0
MRCDE 0C43 09A1
MRCD1 0C6F 0C52
MRCXC 0C6E 0C4D 0C5F 0C77 0C98
MRCX5 OCAA OC9D
MRCOA OC9C OC49 OC9E
MRCOC OC80 OC6D OCA7
MRCOF OCA1 OC93
MRCO1 OC5D
MRC02 0C68 0C69
MRC 03 0C59
MRC05 0C73 0C72
MRC06 0C75 0C7F
MRC0B 0C96 0C4B
MRC 09 0C89 0C66 0C7C 0CA8
MRC10 0C61 0C58
MRC22 OC4E
MRC23 0C7A 0C46
MRC24 0C54 0C50
MR SC 09A3 0D73 0D79 0D7C
MRSCE OD6F 09A4
MRSC1 0D71 0D70
MRSC2 OD75 OD78
MRTER 0C82 0C4A
MRTE1 0C9F 0C92
MRTN
      CA58 0980 0A5A
MTBEG 08D3 OFFC
MTBSY ODAO OD92 OD98
MTDSW 0880 0823 0826 0827 082B 082A 082B 083B 083D 083E
MTEND 08CD 0808 08D1
MTFZ OELE ODF2 OE13
MTF1 0E15 0E14
MT I
      081A 085E
MTIAC 0873 0839
MTIAD C83B
MTIAE 0875 087C
MTIC 0836 0830
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2400 FUNCTION TEST

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MTICL 086A 084A
MTIC1 084D 0843
MTIER 0896 0885 0886 0889 088A 088F 0890 0891 08A4 08A9
MTIE1 086E 086D
MTIR
      0855 0851 0BE0
MTIR1 0851 0872 0874
MTIS
      085A 081B 081C 0869
MTIT 0840 0866
MTIX1 0879 082C 0836 0863
MTIX2 087A 0838
MT1X3 087B 086C
MT1X4 087C 0873
MTIO 0819 09EF 09FF 0D9A
MTRED 09C8
MTREE OD8D 09C9
MTRE1 OD8F ODA2
MTRE2 OD9C
MTRLD 09C5
MTRLE ODA4 09C6
MTRL1 ODAA
MTRL2 ODAE ODA9
MTRST 08AC 0806 0807 08C8
MTTWO 0974 0847 0852 0905 0C80 0C94 0D4A
PATWD 0C8F 0C47 0C5B
       OFFA 080F 0FE5
PEND
PID
       07FF 08D5 0DB5
RAD
       0801 OCBE
RDC KR
      OAEC OB2D
RDT
      0988
RDTE
      OAC8 0989
RDT12 OAD8 0888
RDTXA OAD3 OAE9
RDTXB OAD4 0B28
RDTXC 0848 0841 0867 0868 0869
RDTXD OADS OBID
RDTYO OAD6 OB2F
RDTY4 0986
RDTY6 09BC
RDT03 OB1C OAEB
RDT04 0854 0851
RDT1 OACE 0B37 0B55
RDT15 0B38 0B32
RDT16 0841 0848
RDT17 084D 085A 085B 086B
RDT18 0B5C 0B1F 0B3B
RDT19 0B10 0B08 0B1A 0B1B 0B62
RDT20 082D 0829
RDT22 0B63 0B45
 RDT29 0B15 0AE5
RDT30 0B07 0B25
RDT35 OAE6
RDT36 OAE7
 RDT37 OB2E OB06
 RDT7A 0B57 0ADD 0B4D
RDT8A OAD7 OADO OBO1 OBO4 OB2B OC8C
 RELDV 0132 ODAA
REQDY 0131 0096
       0800 OCB8 OCBA
 RID
 RTN
       0955
 RTN1 0972
       0985
 RWD
RWDE
      0879 0986
 RWDIR OBBA 088E
RWDI1 0892 0880 088E
 RWD12 0888 0890
RWD04 0B7B
RWD08 0B93
 SELSW 087E 08C2 09F6 0A0E 0A15
```

```
SETIO OBE2 08E8
       SETII OBE5
                  091B
       SETI3 OBE3
       SETXO OBCF
                  08E6
       SETX1 0BD2 0919
      SETX3 OBDO
                  OBD3
       SETX4 OCIC OBCE OPEC OBCF 03E2 OBFE OC18 OC22
       SETX5 OC24 O9FD OBD2 OBE5 OCO9 OC1A OC2A
       SETX6 0905
                  0938
       SPFNC 09C3 0860
       SPIAB C89E
                  089C
       SPINT 089A
                  0884
      SPITB 08A1
SPRT1 0860
                  0846 0883
       STAC 09CE
       STACE ODTE
                  09CF
       STAC1 OD80
      STAC2 OD8A
STARE O9AC
                  0D82
       START 012D
                  09AD
       STIR 09CB
       STIRE OBD4
                  0900
       STIRO OBDE
                  OBDB
       STIR1 OBDC
       STIR3
             OBD9
       STIR6 OBEO
       STPSE
STPST
             OBBD
                  0998
             0997
                  08C4
       STPS2
             OBC 7
       STP S6
             OBCD
                  OBCC
       SWC
             087F
                  083C
       SWO
             0802 0A25 0A7E 0AED 0CA3 0CFE 0DED 0E0D
      SW1
             0803 0A3D
             0804 09F2 0A09
       SW2
       SW3
             0805
       TAG01
             0A47 0A38
       TAG 02
             08A0
             OBOE OB23 OD9B ODAD ODB1 OEE1
       TERM
       WRIAI
             0 A87
       WRIX4 OABO OA7B
             OABL OA9A
       WRIX6
       WRIX7
             OAB2
                  0A95
       WRTB
             0A70
                  8AAO
       WRTI
             0A73 0887
       WRTIA OA7A
       WRTIC OA8B OA93 OAAF
       WRTID OASD
                  A8A0
       WRTIE 0A99 0A7D
       WRTIH OAAO
       WRTII OAA9 OA9C OAA2
       WRTM 098B
       WRTME 0A6B 098C
       WRT01 0A94 0A81
       WRT02 0A83 0A98
       WRT03 0A86 0A96
       MTM
             098E
       WTMAB OAC3 088B
       WTME OABE 098F
       END OF ASSEMBLY
----- LAST PAGE ------
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2315 DISK INITIALIZER

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1. PURPOSE

2315 DISK INITIALIZER

THE PURPOSE OF THIS PROGRAM IS TO PREPARE THE 2315 CE DISK PACK FOR USE 8Y THE DISK DIAGNOSTIC TEST PROGRAM. THIS PROGRAM IS RUN NORMALLY AT INSTALLATION TIME, AND WHEN THE PACK DATA HAS BEEN DESTROYED OR CHANGED. IN THIS PROGRAM ALL FILE ADDRESSES AND THE PROPER SECTOR PATTERNS ARE WRITTEN. THE EXCEPTIONS ARE CYLINDERS 90-110 INCLUSIVE.

2. REQUIREMENTS

2.1 PROGRAM REQUIREMENTS

A. PROGRAM PREREQUISITES

THIS PROGRAM MUST RUN UNDER CONTROL OF THE DIAGNOSTIC MONITOR. THE DIAGNOSTIC MONITOR PROGRAM USES 2,047 STORAGE WORDS, AND THIS PROGRAM USES 2047 STORAGE WORDS.

- 8. THIS PROGRAM WILL RUN IN OVERLAP MODE, HOWEVER, TO INSURE A SUCCESSFUL (UNDER ALL CONDITIONS) INITIALIZATION PASS, OD NOT INITIALIZE IN THE OVERLAP MODE. THIS PROGRAM IS FOR THE 18DD-181D WITH EITHER THE 13 SD OR THE 44 SD FILE UNIT.
- C. PROGRAM EDIT.

THIS PROGRAM REQUIRES TWO EDIT CAROS. IF ONLY ONE DISK STORAGE DRIVE IS ATTACHED TO THE SYSTEM, THEN THE INFORMATION FOR SAID DISK STORAGE DRIVE IS PLACED IN THE AREA ENTITLED FILE 1. FOR TWO DISK STORAGE ORIVES, FILL IN FILE 1 AND FILE 2 INFORMATION. THE THIRD DISK STORAGE DRIVE INFORMATION IS PLACED IN FILE 3. THE EIGHT AREAS DESIGNATED 'ALT ADDR FIELD' ARE USED ONLY WHEN ONE OR MORE OF THE ADDRESSES IN THE CE DISK PACK THAT ARE NORMALLY USED ARE NOT USABLE. ANY UNUSABLE ADDRESSES WILL APPEAR IN THE CYLINDER ERROR TABLE. ALL EIGHT ADDRESSES UF AN ERROR CYLINDER WILL 8E RECORDED. THIS TABLE IS PRINTED OUT AT THE END OF THE PROGRAM, PROVIDED THERE HAVE 8EEN ENTRIES. THE EIGHT ADDRESSES NORMALLY USED ARE - 0000, 0008, DD1D, DD18, D638, D64D, D648, AND 065D. IF ADDRESS D64D WAS NOT USABLE FOR SOME REASON, THEN 064D COULD 86 REPLACED WITH 063D. THEREFORE, 063D WOULD BE PLACED IN THE SIXTH AREA SINCE D64D IS THE SIXTH ADDRESS NORMALLY REFERENCED. NOW ALL REFERENCES TO D640 WILL BE REFERENCED INSTEAD TO D63D.

NOTES

NOTE 1

ALL DISK STURAGE ORIVE ASSIGNMENTS (FILE 1, FILE 2, AND FILE 3) AND ALL THE NORMAL ADDRESSES PRIOR TO THE ADDRESS BEING CHANGED MUST ALSO 8E PUNCHED INTO EDIT CARD NUMBER O. WHEN DISK STORAGE DRIVES ARE NOT ATTACHED TO THE SYSTEM, FILL THEIR DESIGNATED AREAS WITH ZEROES. IN OUR EXAMPLE THEN, D000-0008-D010-0018-D638 MUST ALSO 8E PUNCHED PRIOR TO D63D.

NOTE 2

IF AN ADDRESS IS CHANGED, THE SAME EDIT INFORMATION IS REQUIRED 8Y THE 1810 FUNCTION TEST. THE ONLY DIFFERENCE WILL BE THE PID NUM8ER.

EQUIPMENT REQUIREMENTS

2315 CE DISK PACK.

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PART NO. 2196376 PAGE

2315 DISK INITIALIZER

3.0 OPERATING PROCEDURE

PRDGRAM LDADING

PLACE THE 2315 CE DISK PACK IN THE 1810 TD 8E USED AND FOLLOW THE STEPS 8ELDW.

1) TURN POWER ON.

2) WAIT LONG ENOUGH FOR THE MACHINE TO SECOME READY. MACHINE MUST 8E READY PRIOR TO EXECUTING PROGRAM.

STANDARD LOADING PROCEDURES AS DESCRIBED IN THE DIAGNOSTIC MONITOR USE PROCEDURE.

PROGRAM OPERATION.

STANDARO MONITOR OPERATING PROCEDURES APPLY. THESE PROCEDURES ARE SUMMARIZED HERE. SEE DM USE PROCEDURES FOR DETAILS.

1. CLEAR STORAGE TD 70FF

2. LOAD DIAGNOSTIC MONITOR

3. SELECT MODE OF OPERATION

4. SELECT MONITOR CONTROL OPTIONS.

SELECT DRIVE TO 8E RUN FROM TABLE 2.

INSTRUCT MONITOR TO EXECUTE THIS PROGRAM.

7. IF WAIT 30CE OCCURS, SELECT CONTROL AS PER TABLE 3. NOTE --THIS WAIT LOOP IS A SAFETY LOOP TO PREVENT INITIALIZING A DIMAL PACK OR CUSTOMER PACK UNINTENTIONALLY. AN EW62/EW63 CAN OCCUR ON A VIRGIN PACK OR ON AN ERROR CONDITION. THE PROGRAM WILL THEN BRANCH TO THE BOCE WAIT. THEREFORE, CHECK PRINTOUTS BEFORE PRECEEDING. ANALYZE ERROR ADORESSES, IF ERROR OCCURED, SEFORE PROCEEDING WITH INITIALIZATION.

TABLE 2 DEVICE SELECTION

THIS FUNCTION IS USED FOR SELECTING DEVICES FOR MULTIPLE DEVICE PROGRAMS. IF THE ENTRY FOR FUNCTION 2 IS EITHER 0000 OR 8000 THE FIRST FILE WILL 8E EXECUTED.

********* 1. SET FUNCTION 10 IN SENSE/PROGRAM SWITCHES 0 AND 1. * SENSE/PROGRAM * 2. SET PID IN SENSE/PROGRAM SWITCHES 2 THROUGH 7. * 0 1 2 3 4 5 6 7 * 3. SET DESIRED CONTROL OPTIONS IN DATA ENTRY SWITCHES 0-15. * 4. PRESS CONSOLE INTERRUPT. * 1 0 0 0 1 0 0 0 * DATA ENTRY SWITCHES * OESCRIPTION * 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 * * 0 0 0 FIRST FILE A1 * 1 0 0 FIRST FILE A1 * 0 0 1 THIRO FILE A3 ************** TABLE 3 SPECIAL CONDITION CONTROL

THIS FUNCTION IS USED TO CONTROL THE OPERATION OF VARIOUS SPECIAL CONDITIONS OR FUNCTIONS.

| , | ** | * * | ** | * * | ** | *** | ± ± 5 | | <u> </u> | ** | * | , | | | . | . | | _ | |
|-----|------------|------------|-------|-----|-------|-----|--------------|-------|----------|------------|--------|-----|-------|-------|-----------|--------------|-----|-----|--|
| | × | | | | SE/ | | | | | | ~ - | _ | • | 261 | | MCI | IUN | 1 | 1 IN SENSE/PROGRAM SWITCHES O AND 1 |
| × | | | | | | | | | | | ₹. | | . • | 2E I | P1 | U I | N S | ΕN | SE/PROGRAM SWITCHES 2 THROUGH 7 |
| | | U | 1 | 4 | 3 | • | + : | • | 6 | 1 | * | 3 | • | 2F I | UE | SIR | ED | co | NTROL OPTIONS IN NATA SWITCHES A TO 15 |
| 3 | | | | | | | | | | | × | 4 | • | PRE | SS | CON | SOL | Е | INTERRUPT. |
| × | | 1 | 1 | C | 0 | - 3 | (|) (|) (| 0 | * | | | | | | | | |
| * | r | | | | | | | | | | * | | | | | | | | • |
| × | * | ¢* | ** | * * | * * | *> | * * * | * * * | **: | * * | ** | *** | * * * | *** | *** | *** | *** | * * | ****** |
| × | c | | | | | - 1 | DA ' | TΑ | E | NΤ | RY | SW | ITC | HES | | | | * | |
| × | (|) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 12 | 14 | 15 | * | DESCRIPTION * |
| 4 | : 1 | | _ | _ | _ | _ | - | - | • | • | • | | | 12 | 15 | 17 | 1) | Ť. | * |
| 20 | | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | ** | CE RECOGNIZES THAT DISK PACK IS * |
| , | | | | | | | | | | | | | | | | | | * | EITHER A DIMAL, VIRGIN, OR CUSTOMER * |
| | | | | | | | | | | | | | | | | | | * | PACK AND IT IS TO BE INITIALIZED. * |
| - 4 | | | | | | | | | | | | | | | | | | * | * |
| * | • | • | • | • | • | • | • | ٠ | ٠ | • | • | • | • | • | • | 1 | • | * | 8YPASS ARM TO HOME (OCARM RT) 8ETWEEN* |
| 7 | | | | | | | | | | | | | | | | | | * | RTNS. |
| × | • | | • | • | • | • | • | • | • | • | • | • | | | | | 1 | * | SEMI-AUTO I/O AREA SCAN. DISPLAYS # |
| * | | | | | | | | | | | | | | | | | - | * | ONE WORD IN THE ACCUMULATOR EACH TIME* |
| * | | | | | | | | | | | | | | | | | | * | THE START KEY IS PRESSED AFTER EWO6 * |
| * | | | | | | | | | | | | | | | | | | 22 | |
| * | | | | | | | | | | | | | | | | | | | |
| * | | | | - | • | | | | | | | | | | | | | * | ON THE FIRST WAIT. (300A) SCAN RT * |
| * | | | | | | | | | | , | | | | | | | | Τ. | EXITS AFTER I/O WORO 321 OR FNC BIT * |
| * | | | | | | | | | | | | | | | | | | # | 15 + CONSOLE INTERRUPT IS PRESSED. * |
| * | | | | | | | | | | | | | | | | | • | * | * |
| * | | | | | | | | | | | | | | | | | | 卆 | (NOTE 8IT 15 IS A NON OVERLAP* |
| * | ىد مد | د ت | | | د د | | | | | | | | | | | | | * | FNC) |
| * | ም ም | * 1 | ~ ~ ~ | ** | 4 ¥ 3 | * * | ## | 4 X | ** | *** | * ** * | *** | ¢** | * * * | *** | *** | ** | *** | ******************** |

PROGRAM HALTS

THIS PROGRAM HAS ONE HANGUP WAIT 70FF. THIS OCCURS ON A COUBLE OR NON SCHEDULED INTERRUPT ON THIS LEVEL AND ILSW 81T. SEE 8EGINNING OF LISTING FOR LOCATION AND DETAILS.

THE FOLLOWING WAITS MAY OCCUR.

| * A O | DR LASE | 1 * | | | ************* |
|----------------|---------|------|-------------|----------|---|
| . 40 | DK LAGE | | WAIT NUMBER | ¥ | DESCRIPTION * |
| * | | * | | * | ű. |
| * | WAIT1 | * | 30C E | * | THIS IS A SAEETY WALT TO NOTICE THE |
| * | | × | | * | THIS IS A SAFETY WAIT TO NOTIFY THE CE THAT THIS* |
| * | | | | * | IS A DIMAL, CUSTOMER OR VIRGIN PACK. SEE 3.2-7.* |
| 7 | | * | | * | * |
| * | WAIT2 | * | 30ED | * | THIS WAIT SIGNIFIES THE END OF THE PROGRAM. * |
| * | | * | | * | TO DE TION TO THE PRUGRAM. |
| * | | ** | | -T | TO RETURN TO THE MONITOR PRESS RESET + START.* |
| | | | | * | THE WALL IS NECESSARY FOR A DIMAL PACK TO PRE- + |
| * | | * | | * | VENT THE PROGRAM FROM RETURNING TO THE OISK VIA * |
| * | | * | | * | THE MONITOR LOAD TO LOOK FOR THE GIRN VIA |
| * | | * | | * | THE MONITOR LOAD TO LOOK FOR THE PROGRAM CON- * |
| **** | | | | | * |
| and the second | | ~~** | ***** | *** | * ************************************ |

PROGRAM TERMINATION 3.4

415233

THE PROGRAM WILL AUTOMATICALLY TERMINATE AFTER ONE PASS. AN AOOI MESSAGE FOLLOWED BY AN AEOD WILL INDICATE PROGRAM TERMINATION.

IF THE PROGRAM IS NOT ALLOWED TO MAKE A NORMAL TERMINATION, THE OISK PACK WILL NOT BE ACCEPTED BY THE 1810 PROGRAM.

08 DO EWO4 ODON XXXX DSW LGA DDA AAR SCI

2315 DISK INITIALIZER

4. PRINTOUTS

2315 DISK INITIALIZER

4.1 STATUS MESSAGES

PIO MIO RID RAD

0800 A001 0017 XXXX PPC TSC RSC TWC SWE HWE TRC SRE HRE

COMPLETE PASS OF PROGRAM AND STATISTICAL INFORMATION.

0800D A004 DODN XXXX

THIS MESSAGE IS ALWAYS PRECEEDED BY TWO EWDB MESSAGES. THE TWO EWOB MESSAGES INDICATE THAT THE WRONG ADDRESS WAS READ TWICE AFTER THE INITIAL SEEK. HOWEVER, REZEROING THE ARM AND RESEEKING THE PROPER ADDRESS WAS OBTAINED. THE PROGRAM COUNTS THIS AS ONE SEEK ERROR.

0800 AEOO OOON XXXX

END OF DISK DIAGNOSTIC. AN 'AEOD' FOLLOWING AN 'AOO1' EQUALS NORMAL PROGRAM TERMINATION. AN 'AEOD' FOLLOWING AN 'E4D3' INDICATES THAT THE ACCESS ARM DID NOT GO TO HOME DURING INITIALIZATION OF PROGRAM.

0800 A00C . 000N XXXX

THIS MESSAGE IS ACCOMPANIED WITH A 30CE WAIT. IT IS TO INFORM THE CE OF THE 30CE INITIALIZATION WAIT CONDITIONS. SEE SECTION 3.2.7 FOR DETAILS. NUTE THE TABLE 3 DESCRIPTION.

0800 CBAD DDON XXXX ADRO ADR1 ADR2 ADR3 ADR4 ADR5 AOR6 ADR7 THIS IS THE CYLINDER ERROR TABLE (CET) PRINTOUT. THE ADDRESSES HERE ARE IN ERROR. ONE BAD SID (SECTOR ID) WILL CAUSE ALL EIGHT ADDRESSES FOR SAID CYLINDER TO BE INCLUDED IN CET. FOUR LINES OF CET OUTPUT EQUAL A BAD PACK. (SEE EW66) ADRO TO ADR7 ARE THE BAD ADDRESSES (SECTORS 0-7) OF SAID CYLINDER. SEE COMMENTS.

ERROR MESSAGES

THE MESSAGE IDENTIFICATION WORD (MID) FOR ERROR PRINTOUTS IS OF THE FORM EWNN, WHERE,

> E = ERROR MESSAGE IDENTIFIER W = VARIABLE DIGIT DEFINING THE XIO FUNCTION CODE AS FOLLOWS.

0 = NO XIO FUNCTION ASSOCIATED WITH ERROR MESSAGE, OR TEST MESSAGE.

4 = CONTROL FUNCTION (SEEK) 5 = INITIALIZE WRITE FUNCTION 6 = INITIALIZE READ FUNCTION

7 = SENSE DEVICE FUNCTION

NN = MESSAGE NUMBER

P10 MIO RIO RAO MOO1 MOO2 MOO3 MOO4 MOO5

08D0 EW01 DOON XXXX OSW LGA DDA AAR SCI INTERRUPT WAS LOST. PROGRAM AUTOMATICALLY RETRIES TO EXECUTE ROUTINE.

08DO EWO2 OOON XXXX OSW FILE NOT READY, BUSY, OP COMPLETE OR ANY ERROR IS ON.

08D0 EW03 000N XXXX 0SW

OSW HOME BIT NOT" ON OR ARM OIO NOT RETURN TO HOME WITH A ZERO AGORESS FOR A 44 SD OR 204 INCR FOR A 13 SD. DSW SHOULD BE 080X WHERE X = 4 TO 7 FOR A 44 SD ANO X = 0 TO 3 FOR A 13 SD FILE UNIT.

0800 EW05 ODDN XXXX DSW OSW HAS BIT/BITS ON THAT SHOULD NOT BE ON AT THIS TIME. BRANCH, TO MONITOR END ROUTINE. 08 DO EWD 6 OOON XXXX DSW LGA DDA AAR SCI

08D0 EW07 DDON XXXX DSW HARD READ OR WRITE ERROR. INDICATES TEN SOFT READ/WRITE RETRIES WITH FAILURE STILL PRESENT. DSW INDICATES ERROR BITS. EWO6 MESSAGES WILL PRECEED THIS ERROR MESSAGE.

DESIREO ADDRESS IS IN THE TABLE OF BAD ADDRESSES.

ROUTINE TERMINATED. NEXT ROUTINE IS TRIED.

OSW ERROR BIT/BITS ON AFTER A READ OR WRITE.

08 DD EWDB DDON XXXX DSW LGA DDA AAR SCI ACTUAL ADDRESS READ AND THE DESIRED ADDRESS DO NOT AGREE. (RD, RD-CK FUNCTION ONLY) FIRST EWDB WILL CAUSE A RE-READ OF THE DE-SIRED ADDRESS. SECOND EWOB WILL CAUSE A RE-ZERO OF THE ACCESS ARM AND A RE-SEEK AND A READ OF THE DESIRED ADDRESS.

0800 EW09 DDDN XXXX DSW LGA DDA AAR SCI THIS MESSAGE WILL ALWAYS BE PRECEEDED BY TWO EWDB MESSAGES. THE ACTUAL AND THE DESIRED ADDRESSES STILL DO NOT AGREE. (SEE EWDB MESSAGE.) THE ACTUAL ADDRESSES OF THE TWO EWDB MESSAGES ARE THE SAME. THEREFORE, A SEEK ERROR MOST LIKELY OCCURED. HOWEVER, THERE IS STILL A POSSIBILITY OF A READ, WRITE, OR DISK PACK RECORDED DATA ERROR OR ERRORS.

0800 EWOA OOOR XXXX DSW DSW HOME BIT NOT ON OR ARM DID NOT RETURN TO HOME WITH A ZERO ADDRESS RESTORE ACCESS UPERATION. DSW SHOULD BE D80X WHERE X = 4 TO 7 FOR A 44 SD AND X = 0 TO 3 FOR A 13 SD FILE UNIT.

08D0 EW15 DDON XXXX DSW LGA DDA AAR SCI THIS MESSAGE WILL ALWAYS BE PRECEEDED BY TWO EWDB MESSAGES. THE ACTUAL AND THE DESIRED ADDRESSES STILL DO NOT AGREE. (SEE EWDB MESSAGE.) THE ACTUAL ADDRESSES OF THE TWO EWOS MESSAGES ARE NOT THE SAME. THEREFORE, A READ ERROR MOST LIKELY OCCURED. HOWEVER, THERE IS STILL A POSSIBILITY OF A SEEK, WRITE, OR DISK PACK RECORDED DATA ERROR OR ERRORS.

08DD EW20 D002 XXXX DSW LGA DDA AAR SCI WRONG AODRESS READ, DESIRED AND ACTUAL DO NOT AGREE. THIS IS A SECTOR ERROR.

08DD EW21 0002 XXXX DSW LGA DDA AAR SCI READ SUBROUTINE ERROR RETURN. DSW, ADDRESS OR DATA MAY BE IN ERROR. CHECK PRINTOUT CAREFULLY.

08D0 EW40 OOOR XXXX DSW OSW ERROR BITS ON AFTER A SEEK OPERATION. PROGRAM CONTINUES. DSW SHOULD BE 4YOX WHERE Y CONTAINS A O OR B ANO X EQUALS 4 TO 7 FOR A 44 SO AND X EQUALS O TO 3 FOR A 13 SD FILE UNIT.

08D0 EW41 ODDR XXXX DSW LGA DOA AAR SCI OSW ERROR BITS INDICATES A SEEK INVALID ADORESS ERROR. CHECK PROGRAM FOR PROPER AODRESS. PROGRAM BRANCHES TO MONITOR END.

DSW ERROR BITS INDICATES A SEEK INCOMPLETE ERROR. CHECK FILE SEEK CIRCUITS. PROGRAM BRANCHES TO RESTORE ARM AND THEN EXITS TO MONITOR ENO.

0800 EW60 DD01 XXXX OSW LGA DDA AAR SCI WRITE ERROR RETURN. THIS OCCURS IN ROUTINE NO. 01, WHICH

OATE 2BFEB66 01JUL66 04NOV66 010CT67 020EC6B EC NO. 415120 41517B 41 52 33 411B75 411961

0B0B-*

OATE 28FEB66 01JUL66 04NOV66 010CT67 020EC6B EC NO. 415120 41517B 415233 411875 411961

0808-* PROG TO 3 A

2315 DISK INITIALIZER

PLACES THE PROPER PATTERN ON THE DISK.

08 00 EW61 0001 XXXX DSW LGA DDA AAR SCI
READ ERROR RETURN. THIS OCCURS IN ROUTINE NO. 01, WHICH
PLACES THE PROPER PATTERN ON THE DISK.

08 00 EW62 000N XXXX DSW LGA DDA AAR SCI

ERROR OCCURED ON READING SECTOR O OF CE TRACK. THIS READ TESTS FOR A

DIMAL PACK. PROGRAM TRIED TWO TIMES TO READ THIS SECTOR. CE MAY
PROCEED AFTER CHECKING PRINTOUTS (SEE 3.2-7) AS THE PROGRAM WILL
BRANCH TO THE 30CE WAIT FOR INITIALIZATION CONTROL. RE-READ IS VIA A
RE-SEEK OPERATION. ADDRESS DESIRED + ACTUAL DO NOT AGREE.

08 00 EW63 000N XXXX DSW LGA DDA AAR SCI
ERROR OCCURED ON READING SECTOR 7 OF CE TRACK. THIS READ TESTS FOR A
CE PACK. PROGRAM TRIED TWO TIMES TO READ THIS SECTOR. CE MAY
PROCEED AFTER CHECKING PRINTOUTS (SEE 3.2-7) AS THE PROGRAM WILL
8RANCH TO THE 30CE WAIT FOR INITIALIZATION CONTROL. RE-READ IS VIA A
RE-SEEK OPERATION. ADDRESS DESIRED + ACTUAL DO NOT AGREE.

0800 EW66 0002 XXXX DSW LGA DDA AAR SCI
FOUR OR MORE CYLINDERS HAVE BAD SECTORS. THIS PACK IS THEREFORE 8AD,
ACCORDING TO THE DESIGN SPECIFICATIONS. DOES NOT CONTAIN 200 GOOD
CYLINDERS.

08 00 E077 0003 XXXX

WHEN THIS MESSAGE FOLLOWS AN 'E004' IT INDICATES THAT THE DESIGNATED 'CE' CYLINDER (199) ADDRESS 0638 IS 8AD. IT WILL BE NECESSARY TO RE-EDIT THE PROGRAM. CHANGE ADDRESS NUMBER 5 (0638) TO SOME OTHER UNUSED ADDRESS. SUGGESTED ALTERNATE ADDRESS IS 0630 (CYLINDER 198).

0800 EWCE 0002 XXXX DSW LGA DDA AAR SCI

ERROR IN WRITING CE DISK SECTORS 3 AND 7. THESE SECTORS CONTAIN
SECTOR ID, "CEDC" ID WORD, NUMBER OF ERROR SECTORS, SECTOR ADDRESS
ERROR TABLE, AND THE STANDARD PATTERN.

4.3 SYMBOL MEANINGS

AAR - ACTUAL ADDRESS READ AWP - ACTUAL WORD PATTERN (WORD PATTERN READ) DDA - DESIRED DISK ADDRESS (THE ADDRESS THE OPERATION REQUIRES) DSW - DISK STATUS WORD EWP - EXPECTED WORD PATTERN HRE - HARD READ ERROR (TOTAL) RSC - RE-SEEK COUNT (TOTAL) HWE - HARD WRITE ERROR (TOTAL) LGA - LAST GOOD ADDRESS READ PPC - PROGRAM PASS COUNT SCI - SEEK CYLINDER INTERVAL (MEASURED FROM HOME) SRE - SOFT READ ERROR (TOTAL) SWE - SOFT WRITE ERROR (TOTAL) TRC - TOTAL READ COUNT TSC - TOTAL SEEK COUNT TWC - TOTAL WRITE COUNT WEC - WORD ERROR COUNT (THE NUMBER OF THE WORD IN THE RECORD THAT IS IN ERROR) 000N - ANY OF SEVERAL ROUTINE NUMBERS ADRO - CYLINDER X -- SECTOR O ADDRESS. ADR1 - CYLINDER X -- SECTOR 1 ADDRESS. ADR2 - CYLINDER X -- SECTOR 2 ADDRESS.

ADR3 - CYLINDER X -- SECTOR 3 ADDRESS. ADR4 - CYLINDER X -- SECTOR 4 ADDRESS. ADR5 - CYLINDER X -- SECTOR 5 ADDRESS. ADR6 - CYLINDER X -- SECTOR 6 ADDRESS. ADR7 - CYLINDER X -- SECTOR 7 ADDRESS. XXXX - UNKNOWN ADDRESS (RELOCATABLE)

5. COMMENTS

2315 DISK INITIALIZER

5.1 DISK ADDRESSING SCHEME

THE FOLLOWING IS THE FORMAT FOR THE DISK ADDRESSING SCHEME --

| HEX WD N | N | N | N |
|------------------------------|---------|-------------------------------|-------------|
| 8ITS 0 1 2 3 | 4 5 6 7 | B 9 10 11 | 12 13 14 15 |
| CODE X X X X | хссс | c c c c | C H S S |
| CYL. POS CNT READ DOWN | | 0 0 0 0 1 0 0 0 6 8 4 2 | 0 0 1 |

C = CYLINDER H = HEAD S = SECTOR X = NOT USED

THE LOWEST CYLINDER ADDRESS IN HEX = 0000
THE HIGHEST CYLINDER ADDRESS IN HEX = 0657
THE ADDRESSES ARE CYLINDER 0, HEAD 0, SECTOR 0 TO CYLINDER 202, HEAD 1, SECTOR 3.

THE ABOVE ADDRESSING FORMAT IS USED FOR ALL THE SECTOR IDENTIFICATION WORD. (CALLED SID) IT APPEARS ON THE DISK AND AS THE FIRST WORD OF DATA TO BE READ OR WRITTEN TO OR FROM CORE. IT IS THE SECOND WORD OF THE FIELD ADDRESSED BY THE IOCC. (THE FIRST WORD OF SAID FIELD IS THE WORD COUNT) IT APPEARS IN THE MESSAGE PRINTOUTS IN MODIFIER POSITIONS TWO THRU FOUR. (THESE ARE THE DISK ADDRESSES)

- A. TO CONVERT HEX DISK ADDRESS WORD TO DECIMAL. PERFORM THE FOLLOWING
 - 1. FIND CURRESPONDING C.V. FOR EACH N IN THE ADDRESS.
 - ADD THE C.V.'S TOGETHER.
 - B. C.V. TOTAL IS THE ACTUAL CYLINDER NUMBER IN DECIMAL.

02DEC68

411961

- 4. FIND CURRESPONDING S.N. FOR UNITS N OF HEX ADDRESS.
- S.N. IS THE ACTUAL DECIMAL HEAD SECTOR NUMBER.

EXAMPLE ---

CONVERT 03 BD TO DECIMAL CYLINDER AND SECTOR NUMBERS.

SOLUTION -- FROM TABLE

| C | , | 3 | 8 | D | | | | | C.V. | S.N. | |
|---|----|---|-----|-----|---|---|---|---|------|------|---------|
| | | • | • | • | | | | | | | |
| | | • | • | • | | | | | | | |
| | | • | • | • | • | • | • | • | 1 | 5 | |
| | | • | • | | | | | | | | |
| | | • | • | • | • | • | | • | 22 | | |
| | | • | • | | | | | | | | |
| | | • | • | • | • | • | • | • | 96 | | |
| | | | | | | | | - | | | |
| C | Ϋ́ | L | ΕNI | DEF | ₹ | | | | 119 | 5 | SEC TOR |
| | | | | | | | | | | | |

DATE 28FE866 01JUL66 04NOV66 01OCT67 02DEC68 EC NO. 415120 415178 415233 411875 411961

PROG ID 0B08-* PAGE 4 DATE 28FEB66 01JUL66 04NOV66 010CT67 EC NO. 415120 415178 415233 411875

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PAGE 4A

2315 OISK INITIALIZER

2315 OISK INITIALIZER

B. TABLE 3. HEX ADDRESS CONVERSION

| * * * | **** | *** | **** | ***** | * ** * | *** | **** | *** | *** | ***** | **** | | **** | | | |
|---------|--------|------|-------|-------|---------|------|--------|--------------|------------|----------|------|-----|--------|-----|-------|-------|
| * | | | | | | | | ,. | | | **** | ** | **** | *** | ***** | ***** |
| * | | | | | | 015 | K AO | DDE. | cc | | CV | _ | CVLI | NDC | R VAL | HF * |
| * | | | | | | | RD IN | | | | C.V. | - | CYLI | MDE | K VAL | |
| * | | | | | | NO | יוז טא | V (1) | - ^ | | C 11 | | C | | | * |
| * | | | | | | • 0 | NN | NI. | | | 2.N. | = | 2F C I | UR | NUMBE | |
| * | ZERO N | 10 T | ווכבה | | • | • 0 | 14 14 | 14 | | | | | | | | * |
| * | ACKO I | 101 | OSED | • • • | • • | | • • | • | | | NNN | = | | | RESS | |
| ** | | | | | | • | • | | • | | | | 000 | TO | 657 | * |
| | • | • | • • • | • • • | • • | • | • | | • • • | • • • • | • • | | | | | * |
| * | • | | | | | | • | | | | • | | | | | * |
| *** | | | | | | | | | | | • | | | | | * |
| * | **** | *** | **** | **** | **** | *** | *** | *** | ****** | ***** | *** | ** | **** | *** | *** | **** |
| * | N | | | | * | | | | | * | | | | | | * |
| * | IN | | C.V. | | * | | N | | | * | N | | | | | * |
| * | • | | C. V. | | • | | • | | C.V. | * | • | | C.V. | + | S.N. | * |
| * | 0 | = | 00 | | * | | • | | | * | • | | | | | * |
| * | U | = | 00 | | * | | 0 | = | 0 | * | 0 | = | 0 | + | 0 | * |
| * | , | | • | | * | | 1 | = | 2 | * | 1 | = | 0 | + | 1 | * |
| * | 1 | = | 32 | | * | | 2 | = | 4 | * | 2 | = | 0. | + | 2 | * |
| * | _ | | | | * | | 3 | = | 6 | * | 3 | = | 0 | + | 3 | * |
| | 2 | = | 64 | | * | | 4 | = | В | * | 4 | = | 0 | + | 4 | * |
| ** | _ | | | | * | | 5 | = | 10 | * | 5 | = | 0 | + | 5 | * |
| * | 3 | = | 96 | | * | | 6 | = | 12 | * | 6 | = | 0 | + | . 6 | * |
| * | | | | | * | | 7 | = | . 14 | * | 7 | = | 0 | + | 7 | * |
| * | 4 | = | 12B | | * | | В | = | 16 | * | В | = | 1 | + | 0 | * |
| * | _ | | | | * | | 9 | = | 18 | * | 9 | = | 1 | + | 1 | * |
| * | 5 | = | 160 | | * | | Α | = | 20 | * | Α | = | 1 | + | 2 | * |
| * | | | | | * | | В | = | 22 | * | В | = | 1 | + | 3 | * |
| * | 6 | = | 192 | | * | | С | = | 24 | * | C | = | 1 | + | 4 | ** |
| * | | | | | * | | D | = | 26 | * | D | = | 1 | + | 5 | * |
| * | | | | | * | | Е | = | 2B | * | Ε | = | 1 | + | 6 | * |
| * | | | | | * | | F | = | 30 | * | F | = | 1 | + | 7 | * |
| * | | | | | * | | | | | * | | | | | | * |
| *** | **** | *** | *** | **** | * * * * | **** | **** | *** | *** | ***** | **** | *** | **** | *** | **** | **** |

5.2 ROUTINES

IT IS THE INTENT OF THIS SECTION TO DESCRIBE THE FUNCTIONS OF EACH TEST ROUTINE AND THE OISK SUPERVISOR ROUTINES. THE FOLLOWING ARE THE IMPORTANT OISK SUPERVISOR ROUTINES.

| PROGRAM LISTING LABEL | FUNCTION |
|-----------------------|---|
| OCARM | RETURN ARM TO HOME |
| OEXEQ | SETUP AND EXECUTE THE LOCC. |
| DCABP | BYPASS CYLINOERS 90 THRU 110. |
| DCROY | FILE READY, NOT BUSY AND NO ERRORS. |
| OCOS W | SENSE DSW AND SAVE IT. |
| DCRTN | ROUTINE NUMBER AND PROGRAM CONTROL ROUTINE. |
| OCSK | SEEK SUBROUTINE. |
| OC WR | WRITE SUBROUTINE. |
| OCRO | REAO SUBROUTINE. |
| COTRT | COMMON DATA TRANSFER, ROUTINE. |
| NTRPT | INTERRUPT ROUTINE. |
| START | MONITOR CONTROL RETURN. |
| ENO | MONITOR ENO ENTRY. |

THE OISK SUPERVISOR ROUTINES ARE THE INTERFACE BETWEEN THE DIAGNOSTIC MONITOR AND THE TEST ROUTINES. THESE ROUTINES OF THE BASIC TESTING, CHECKING AND CONTROLLING FOR THE USING ROUTINES WHICH MAY INCLUDE OTHER SUPERVISOR ROUTINES AS WELL AS TEST ROUTINES. THEREFORE, THE ERROR MESSAGES OF SUPERVISOR ROUTINES POINT TO BASIC OR GENERAL PROBLEMS AND SHOULD NOT BE DISREGARDED OR NOTICED CASUALLY. IN SHORT, ALL ERROR MESSAGES SHOULD BE CAREFULLY ANALYZED TO SEE HOW THEY RELATE TO EACH OTHER.

NOTE

AN UNSCHEOULED INTERRUPT WILL CAUSE A PROGRAM HANG CONDITION. SEE THE INTERRUPT ROLL INF.

AGAIN IT MUST BE SAID, 'ALL ERROR MESSAGES MUST BE ANALYZED TO FINO THEIR ASSOCIATION WITH EACH OTHER.'

ROUTINE 01 WRITE SECTUR IDENTIFICATION ON CYLINOERS 000 (0000) THRU 0B9 (02CB) AND 111 (037B) THRU 202 (0650) WRITES ALTERNATE WORST CASE PATTERNS ON ALL CYLINOERS AND USES 2 SECTORS TO LOG ALL CYLINDERS THAT ARE BAD. THE CYLINDER ERROR TABLE (C.E.T.) IS LOCATED ON SECTOR ID 063B AND 063F.

ROUTINE 02 VERIFIES CORRECT ADDRESSES ON ALL CYLINDERS (EXCEPT 90 - 110 INCLUSIVE). THIS IS A REVERSE READ. STARTS AT CYLINDER 202 AND READS TO HOME ADDRESS 0000 (HEX).

NOT

ANY ERROR TYPEUUTS DURING ROUTINE 2 WILL CAUSE THE INITIALIZATION PROGRAM TO BE RESTARTEO. THESE TYPEOUTS COULO INDICATE IMPROPER SEEK ANO WRITING OF THE SECTOR ADDRESS, THEREFORE TO ENSURE PROPER INITIALIZATION THE PROGRAM IS AUTOMATICALLY RESTARTED. IF ERROR MESSAGES WITH ROUTINE 2 OESIGNATEO KEEP REOCCURRING, THIS INDICATES IMPROPER SEEK INCREMENTING FROM CYLINOER O TO 202. INVESTIGATE SEEK ERRORS BEFORE TRYING TO INITIALIZE THE PACK.

ROUTINE 03 WRITES THE CE SECTORS WHICH CONTAIN THE CYLINDER ERROR TABLE OATA. THE CE SECTORS ARE IDENTIFIED BY THE WORD ' CEOC ' FOLLOWING THE SECTOR ID. 1313 ON SECTORS 0,2,5, AND 7. E5E5 ON SECTORS 1,3,4, ANO 6. THE C.E.T. IS PRINTED AT THE ENO OF THE PROGRAM IF THERE ARE ENTRIES IN IT. CE SECTORS ARE 3 AND 7.

NOTE

IF AN ERROR OCCURS DURING THIS ROUTINE THAT INDICATES IMPROPER CE OATA SECTOR, AN ALTERNATE SHOULD BE SELECTED VIA EDIT CAROS.

----- LAST PAGE -----

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2315 DIAGNOSTIC DISC INITIALIZATION APPENDIX

PART NO. 2196376 PAGE 6

2315 INITIAL

6.1 EDIT PROCEDURE

THE FOLLOWING EDIT PROCEDURE IS FOR CARD INPUT. THE EDIT PROCEDURE FOR PAPER TAPE INPUT IS LOCATED IN THE PAPER TAPE EDIT UTILITY PROGRAM DOCUMENTATION. THE PROPER EDIT CARDS MUST BE THE LAST CARDS IN THIS PROGRAM DECK. THE FOLLOWING FORMS ARE PROVIDED TO AID IN MANUALLY PREPARING THESE EDIT CARDS OR UPDATING EXISTING EDIT CARDS. IF IT IS NECESSARY TO PREPARE OR MODIFY EDIT CARDS, FILL IN THE NECESSARY DATA IN THE FORMS PRIOR TO PUNCHING THE CARDS. CARD COLUMNS THAT ARE SHADED SHOULD BE LEFT BLANK. DDEF STANDS FOR DEVICE DEFINITION EDIT FIELD. IT INCLUDES: 1. THE INTERRUPT LEVEL ASSOCIATED WITH THIS DEVICE (USE HEX NOTATION, 00-17).

2. THE ILSW BIT POSITION ASSOCIATED WITH THIS DEVICE (USE HEX NOTATION, 0-F).

3. THE CHANNEL ASSIGNED TO THIS DEVICE (0-8). IF THIS IS A DPC DEVICE, PUNCH AN F" IN THE CARD COLUMN. THE LAST EDIT CARD IS THE "END EDIT CARD". THE INFORMATION IN THIS CARD INCLUDES: 1. AN E'IN COLUMN 1. 2. THE PID FOR THIS PROGRAM (COL 2-3). 3. A TERMINATOR WORD OF FFFF"

| | | | • | DRIVE 1 | DRIVE 2 | DOLLE 2 | | | | | 1001011 (COL , 2 | -3/. 3. A | LERMINATOR WO | RD OF FFFF | (COL 7-10). |
|------|---------------------|------------|------------------------|--|---|---|-----------------------|-----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------|-------------|
| 1 | | | | DDEF | DDEF | DRIVE 3 DDEF | | | ALT | ERNATÉ FILE | ADDRESSES | | | | |
| | | | | ENTRY 1 | ENTRY 2 | ENTRY 3 | ENTRY 4 | ENTRY 5 | ENTRY 6 | ENTRY 7 | ENTRY 8 | ENTRY 9 | ENTRY A | ENTRY 0 | |
| | | | | | | | | | | | | | ENTRY A | ENTRY B | |
| | | ш | | | X | | | | | | | | | | 1 . 1 |
| | <u> </u> | ENC | I ES | S E S | 1 1 1 1 1 | EX) (HEX (OR F | | 7 | _ | | | | · | | : |
| | ₩ d | SEQUI | NTR | F I I | L T (HE) | 10 11 1 | ICE 10E | S 8 | O CE | CE 1 | CE 5 | 9 | E 7 | E 8 | |
| | PROGRA | RD SI | MBER IT EI B) | INTERRUPT LEVEL (HEX) ILSW BIT (HE | ERR EL NNE | ERRI EL NNEI | RESS ERENC 0000 | RESS ERENC 0008 | REN 001 | REN 001 | ESS RENC 0638 | ESS RENC 0640 | ESS RENC 0648 | ESS RENCI | |
| | A. | CARD | NUMBE EDIT (1-B) | INTERRUPT LEVEL (HEX) ILSW BIT (HEX) CHANNEL (OR F) | INTERRUPT LEVEL (HEX) ILSW BIT (HE CHANNEL (OR | INTERRUF LEVEL (F ILSW BIT CHANNEL | ADDRES | ADDR REFE | ADDRESS REFERENC | ADDRESS REFERENC | 18.5 | P.E. | P.E. | E E | |
| COLU | IMN 1 2 3 4 5 6 7 | 7 8 9 11 | 12 13 14 15 | 16 17 18 19 20 21 | 1 1 1 1 | | | | | A & % | ADD RE | AD RE | AD RE | AP & & | |
| | | | | | | | | | 46 | 51 | 56 | 6 | 65 | | |
| | | 1112 | 7 | 3118 | | | | | | | | | | - | |
| CARD | 0 E 0 8 0 0 E | | 000 | | | 1111 | 31118 | TIE | 1 | | | | 4 1 1 1 1 1 2 | | 3 1 1 1 |
| | | | 7 -1 -1 -1 | | | | 4 | | | | | | | | 3111 |
| | | | | | | | | | | | | | | | 7111 |
| END | E 0 8 0 0 0 F | FFF | | | | <u> </u> | | | | | | | | | |
| | | 1.1.1. | | 3 1 1 8 | | | | | | | | | | | 3 |
| 1 | | | | | | | | | | | | | | | 3 1 1 1 |
| CARD | O CONTAINS THE DDEF | 'S END THE | 2210 50111 | <u> </u> | | | | | | | | | | | |

THE DDEF'S FOR THE 2310 CRIVES. REFER TO NOTE AT BOTTOM OF PAGE.

CARD END IS THE "END EDIT CARD". PUNCH EXACTLY AS IS SHOWN.

** ADDRESSES THAT ARE NORMALLY USED. THESE ADDRESSES NEED NOT BE PUNCHED UNLESS AN ADDRESS IS BEING CHANGED. THEN, ALL ADDRESSES TO THE LEFT OF SAID CHANGE MUST BE PUNCHED, AND THE TOTAL NUMBER OF ALL ENTRIES INDICATED (COL. 15). IF SYSTEM HAS AT OR AZ FILE, THE UNUSED DRIVE FIELDS MUST BE PUNCHED 0000 ONLY WHENEVER AN ADDRESS REFERENCE FIELD IS PUNCHED. (OTHERWISE LEAVE UNUSED DRIVE FIELDS BLANK.) SEE SEC. 2.2.1.B

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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM PART ND. 2196374 PART NO. 2196374 PAGE 2315 DISK INITIALIZER PAGE 2315 DISK INITIALIZER 3001 ORG *&/3001 80800020 RUPT DN THIS LEVEL WITH 80800700 80800030 THIS ILSW BIT, DR 2--80800710 80800040 A DDUBLE OR NDN-RESETABLE 80800720 80800050 INTERRUPT. CONDITION 80800730 1800-1810 FILE DIAGNOSTIC* 80800060 TWO WILL BE INDICATED BY 80800740 TEST. PRDGRAM RELDCATED # 80800070 HAVING INTERRUPT LEVEL BIT 80800750 AT 2047 DR HIGHER. 80800080 STILL DN IN THE CONSDLE TWD EDIT CARDS REQUIRED.* 80800760 80800090 LITES. THE TRANSFER 80800770 SEE WRITEUP FOR DETAILS. * 80800100 VECTOR IS ZEROED AFTER THE 80800780 80800110 ADDRESS IS SET IN THE 80800790 80800120 MLSCF TABLE. 80800800 80800130 80800810 80800140 80800820 *** PROGRAM CONTROL 07FF ORG 80800150 ***-/6803** 80800830 CONDITION WAITS **** 80800160 80800840 80800170 80800850 ו••••••••• 80800180 80800860 3001 1 089C DC WAIT1 CE WAIT NUMBER 1 80800190 EQUATE TABLE FOR MONITOR * 80800870 80800200 *..... 80800880 80800210 80800890 WAIT1 -- IS TO LET THE **8EGIN EQU** 80800220 80800900 CE KNOW THAT A DIMAL. 0120 80800230 START EQU 8EGIN&1 80800910 012E CUSTDMER, OR VIRGIN PACK 80800240 END EQU START&1 80800920 IS TO BE INITIALIZED. 012F LDG EQU 80800250 END&1 80800930 THIS WAIT ALLDWS THE CE TD 0130 ERRDR EQU 80800260 LDG&1 80800940 MAKE THE DECISION WHETHER 0131 REQD V EQU 80800270 ERRDR&1 80800950 THIS PACK IS DR IS NOT TO 0132 80800280 RELDV EQU RE QDV&1 80800960 BE INITIALIZED. 0133 80800290 HALT EQU RELDV&1 80800970 80800300 80800980 80800310 *••••••• 3002 1 088F 80800990 DC WAIT2 END OF INIT PGM PROGRAM START TABLE * 80800320 80801000 80800330 *......... 80801010 80800340 80801020 07FF 0 0C00 WAIT2 -- INDICATES THAT PID DC 80800350 /0C00 PRDGRAM ID 80801030 THE END DF THE INITIAL-0800 0 0000 80800360 RID DC 0 RDUTINE ID 80801040 IZATION PROGRAM HAS BEEN 0801 0 0000 RAD DC RDUTINE ADDR 80800370 0 80801050 REACHED. NOTE -- IF THIS 0802 0 0000 SWO DC 80800380 0 FUNCTION 00 80801060 PRDGRAM WAS LDADED FROM 0803 0 0000 SW1 80800390 DC 0 01 80801070 THE DISK VIA DIMAL, DD NOT 80800400 0804 0 0000 SW2 DC 0 10 80801080 0805 0 0000 TRY TO PROCEED WITHOUT RE-80800410 SW3 DC 11 80801090 LDADING DISK DIMAL PGMS. 80800420 80801100 TO RECOVER FROM THIS WAIT. 80800430 *........ 80801110 PRESS STOP-RESET-START IN 80800440 MAINLINE SEQ CTRL FLD * 80801120 THAT ORDER. THIS WILL RE-80800450 *..... 80801130 TURN CONTROL TO THE 80800460 80801140 0806 1 0821 MDNITDR. IΡΑ INIT PRDG ADDR 80800470 80801150 0807 1 084C LPA DC 80800480 DLPA LDDP PRDG ADDR 80801160 0808 1 0853 END PRDG ADDR 80800490 EPA DC DEPA 80801170 7001 DRG *&/3FFE 0809 0 0000 LIV DC 80800500 0 LDST NTRPT RT ENTRY 80801180 080A 0 0000 80800510 XNR DC 80801190 80800520 080B 0 0000 MLN DC Ω MAIN LINE ENTRY 80801200 080C 0 FFFF **** ERROR TRAP 01 **** TERM DC 80800530 /FFFF TERMINATOR 80801210 **** PROGRAM HANGUP **** 080D 1 0FF8 PEND DC 80800540 OMEGA LAST WDRD OF PRDG 80801220 080E 0 0000 80800550 0 80801230 080F 0 0000 80800560 DC' 0 80801240 0810 0 0000 80800570 DC. 0 80801250 0811 0 0000 80800580 DC 0 80801260 7001 1 08F0 DC NTRER INTERRUPT ERROR TRAP 0812 0 0000 80800590 80801270 80800600 80801280 *....* 80800610 80801290 ALL SCHEDULED INTERRUPTS 80800620 EDIT DATA & ADDR T8L # 80801300 SET A TRANSFER VECTOR IN 80800630 *.......... 80801310 THE INTERRUPT ROUTINE. 80800640 80801320 0813 0 0000 IF SAID VECTOR WORD IS EDTA1 DC 8080065**0** 0 A1 DISK DEFINE FLD 80801330 0814 0 0000 BLANK, THE HANGUP WILL 80800660 EDTA2 DC 0 A2 DISK DEFINE FLD 80801340 DCCUR. THE CAUSE MAY BE 0815 0 0000 EDTA3 DC 80800670 0 A3 DISK OFFINE FLD 80801350 DNE OF TWD CONDITIONS. 80800680 80801360 1-- AN UNSCHEDULED INTER-0816 0 0000 DSKAO DC 70000 80800690 000 DISK CYL ADDR 80801370

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2315 DISK INITIALIZER

| | | | T T | • | | | |
|-------------------------------|--|---|----------------------|---------------------------|--|---|--------------|
| 0817 0 0008 | DSKA1 DC /0008 | 001 DISK CYL ADDR | 80801380 | 084F 0 C3B5 | LD 3-75 | GET POLLING ADDR | 80 |
| 0818 0 0010 | DSKA2 DC /0010 | 002 DISK CYL ADDR | 80801390 | 0850 O D08A | STO MLN | SET IT IN MLSCF | 80 |
| 0819 0 0018 | DSKA3 DC /0018 | 003 DISK CYL ADDR | 80801400 | 0851 1 4080 0840 | BSC I DLPA | EXIT TO MONITOR | SX 80 |
| 081A 0 0638 | DSKA4 DC /0638 | 199 DISK CYL ADDR CE | 80801410 | | * | CATT TO MONITOR | * 80 |
| 081B 0 0640 | DSKA5 DC /0640 | 200 DISK CYL ADDR | 80801420 | • | ************ | ********************** | |
| 081C 0 0648 | DSKA6 DC /0648 | 201 DISK CYL ADDR | 80801430 | | | PROGRAM RDUTINE | |
| 081D 0 0650 | DSKA7 DC /0650 | 202 DISK CYL ADDR | 80801440 | | | | * 80 |
| | * | * | 80801450 | • | * | *************************************** | |
| | * | * | 80801460 | 0853 0 0000 | DEPA DC 0 | ENTRY | * 80 |
| | * BEGI | N RDUTINE * | 80801470 | 0854 1 6700 0B88 | LDX L3 DCT | | 808 |
| | * | | 80801470 | 000. 1 0.00 0000 | * | SET X3 ADDR CTRL | SE 80 |
| | ± | ± | | 0856 0 438E | | 00 TO 0515105 551110 | 808 |
| 081E 0 4480 012C | EXEQD BSI I BEGIN | BR TO MONITOR XM | 80801490 80801500 | 0857 1 4C80 0853 | BSI 3 -114 | BR TO RELEASE DEVISE | |
| 0820 1 07FF | DC PID | PROG ID ADDR | PA. | 0657 1 4000 0855 | BSC I DEPA | EXIT FRDM PROGRAM | SX 808 |
| 0020 1 0711 | # DC P1D | PROG ID ADDR | 80801510 | | • | ¥ | * 808 |
| | ** | * | 80801520 | | ****************** | **************** | |
| | *••••••••••••••••••••••••••••••••••••• | | 80801530 | | * MAI | NLINE PROGRAM CTRL * | * 808 |
| | | IAL PROG ROUTINE * | 80801540 | | ************************************** | *************** | 808 |
| | ******** | • | 80801550 | | * | * | * 808 |
| 2021 0 0000 | * | * | 80801560 | 0859 0 6116 | DCTRL LDX 1 22 | SET CLEAR LDOP XINT | SE 808 |
| 0821 0 0000 | DIPA DC 0 | ENTRY | 80801570 | 085A 0 1010 | SLA 16 | CLR ACCUM | 808 |
| 0822 1 6700 0888 | LDX L3 DCT | SET X3 ADDR CTRL SE | 80801580 | 0858 1 D500 088D | DCTL1 STD L1 DCT&5 | RESET DCT FIELD | 808 |
| | * | • | 80801590 | 085D 0 71FF | MDX 1 -1 | DEC LODP CTRL | 808 |
| 824 0 CODF | LD SW2 | GET SW2 FUNCTION | 80801600 | 085E 0 70FC | MDX DCTL1 | BR LDDP | 808 |
| 0825 1 4C08 0830 | BSC L UNTA1,& | BR IF DISK UNIT AL | 80801610 | | * | · | 808 |
| 0827 0 1001 | SLA 1 | SHIFT B1 TD B3 | 80801620 | 085F 1 6700 0B88 | DCTL2 LDX L3 DCT | SET X3 ADDR CTRL | 808 |
| 0828 1 4C28 082D | BSC L UNTA2,Z& | BR IF DISK UNIT A2 | 80801630 | | * | TEL MO ADDR OTHE | 808 |
| 082A 1 6600 0815 | UNTA3 LDX L2 EDTA3 | GET UNIT A3 ADDR | 80801640 | 0861 0 C300 | LD 30 | CLR A REG | 808 |
| 182C 0 7005 | MDX UNTA1&2 | BR TD SET ADDRS | 80801650 | 0862 0 D30A | STO 3 10 | SET PRESENT ADDR | 808 |
| | * | | 80801660 | | * | SET TRESERT ADDR | |
| 082D 1 6600 0814 | UNTA2 LDX L2 EDTA2 | GET UNIT A2 ADDR | 80801670 | 0863 0 C3F8 | LD 3-8 | GET A CSI DF ONE | 808 |
| 82F 0 7002 | MDX UNTA1&2 | BR TD SET ADDRS | 80801680 | 0864 0 D30B | STD 3 11 | SET IN DESIRED ADDR | 808 |
| | * | | 80801690 | 0865 0 43AE | BSI 3 -82 | | 808 |
| 830 1 6600 0813 | UNTAL LDX L2 EDTAL | GET UNIT AL ADDR | 80801700 | | * | BR TD SEEK SUB RT | SC 808 |
| 0832 1 6E00 0AE2 | STX L2 CHNSA | SET ADDR IN REQ RT | 80801710 | 0866 0 4380 | BSI 3 -128 | ED TO DOLLOW OF | 808 |
| 834 1 6E00 OAF3 | STX L2 CHNRA | SET ADDR IN REL RT | | 0000 0 4380 | b31 3 -128 | BR TD DCARM RT | SC 808 |
| 034 1 0200 0A13 | SIX LZ CHNKA | SET ADDR IN REC RT | 80801720 | 0967 1 4000 0000 | T 0.56 1 5111.611 | | 8 0 8 |
| 034 0 4304 | T DC1 3 110 | DO TO DECUEET OF CO | 80801730 | 0867 1 4C00 0880 | BSC L DMLCK | BR TO DIMAL CHECK | SC 808 |
| 0836 O 438A | B\$I 3 -118 | BR TD REQUEST RT SC | 80801740 | 00/0 1 0/00 0000 | # Data a series | | 808 |
| 2027 1 6400 0000 | * | 055 1551 4055 | 80801750 | 0869 1 C400 0803 | DCTL3 LD L SW1 | GET FNC SW 1 INFD | 808 |
| 0837 1 C400 08DD | LD L DVA | GET AREA CDDE | 80801760 | 0868 1 4C2 0 0 879 | BSC L DCTL5,Z | BR IF FNC NOT ZERO | 808 |
| 0839 0 D305 | STD 3 5 | SET AREA CODE IN DCT | 80801770 | | * | | 808 |
| 083A 0 C3C9 | LD 3-55 | GET BASIC INST | 80801780 | 086D 1 7401 08A1 | MDX L DCT&25,1 | ADD DNE TD RT NUMBER | 808 |
| 083B 0 EB05 | DR 35 | DR IN AREA CDDE | 80801790 | | * | | 808 |
| 083C 0 D38D | STO 3-67 | SET IN ADJ INST | 80801800 | 086F 1 6680 0BA1 | DCTL4 LDX 12 DCT&25 | GET RT NUMBER | 808 |
| 083D 0 EBFF | DR 3 -1 | MDDIFY INST | 80801810 | 0871 1 6E00 0800 | STX L2 RID | SET IN TABLE | 808 |
| 83E 0 D3BB | STD 3 -69 | SET IN NEW INST | 80801820 | 0873 1 C600 087C | LD L2 DDSA-1 | GET RT ADDR | 808 |
| | * | | 80801830 | 0875 1 D400 0801 | STD L RAD | SET IN TABLE | 808 |
| 83F 0 438E | BSI 3 -114 | BR TD RELEASE RT SC | 80801840 | 0877 1 4E80 087C | BSC I2 DDSA-1 | BR TD EXEQ RT | SX 808 |
| | * | | 80801850 | · · | * | CH ID ENEW IN | 808 |
| 840 0 C384 | LD 3 -76 | GET ML ENTRY | 80801860 | 0879 O E3FD | DCTL5 AND 3 -3 | PASS MAX RT CNT | |
| 841 0 DOC9 | STD MLN | SET IT IN CTRL TBL | 80801870 | 087A 0 D319 | STD 3 25 | SET RT NUMBER IN DCT | 808 |
| _ | * | | 80801880 | 087B 0 70F3 | MDX DCTL4 | BR TD CONTINUE | |
| 842 0 C8D3 | LDD DSKAO | GET DISK ADDRS | 80801890 | | * | ON ID CONTINUE | . 808 |
| 843 0 DBD4 | STD 3 -44 | SET IN TBL | 80801900 | · | * | ¥ | 808 |
| 844 0 C8D3 | LDD DSKA2 | J2. IN 100 | 80801900 | | · · · · · · · · · · · · · · · · · · · | / DIAC CTADT | 808 |
| 845 0 DBD6 | STD 3 -42 | | | | -1- | C DIAG START ADDR * | 808 |
| 846 0 C8D3 , | | • | 80801920 | | ~····································· | | 808 |
| | LDD DSKA4 | | 80801930 | 0976 1 0006 | * D.C | * | 808 |
| 847 0 DBD8 | STD 3 -40 | | 80801940 | 087C 1 088C | DC DC EDD | NO RT SEL END DIAG. | . 808 |
| 848 0 C8D3 | LDD DSK A6 | • | 80801950 | 087D 1 0D83 | DDSA DC FOLAA | WR ADDR AND SECT PAT | 808 |
| 349 0 DBDA | STD 3 -38 | | 80801960 | 087E 1 0E07 | DC FO2AA | VERIFY ALL ADDR RT . | 808 |
| | * | 5.1.5 TO 110115 | 80801970 | 087F 1 0E32 | DC F03AA | WR CE SECT 3/7 DATA | 808 |
| 34A 1 4C80 0821 | BSC I DIPA | EXIT TO MONITOR SX | 8080198 0 | | * | * | 808 |
| | * | * | 80801990 | | * | **************** | 808 |
| | | ******* | 80802000 | | | L-CUST-CE PACK CK RT * | 808 |
| | * LOOP | PRDGRAM ROUTINE # | 80802010 | • | | *************************************** | 8086 |
| | | ****** | 80802 02 0 | | * | * | 808 |
| | * | * | 80802030 | 0880 0 C3D8 | DMLCK LD 3 -40 | GET CE HIST ADDR | |
| • | 01.04.00 | ENTRY | 80802040 | 0881 0 D30B | STD 3 11 | SET DESIRED ADDR | |
| 84C 0 0000 | DLPA DC O | LIVINI | | | | | |
| 84C 0 0000 84D 1 6700 0888 | LDX L3 DCT | SET X3 ADDR CTRL SE | 80802050 | 0882 0 43AE | BSI 3 -82 | BR TO SEEK SUB RT | SC 8080 |

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|------------|---|---|---------------------------------------|--|--------|
| | | | | | |
| | | * | 80802740 | * 80803420 | |
| (| 0883 0 C3E5 | LD 3-27 GET WORD COUNT STO 313 SET WDRD COUNT | 80802750 8080276 0 | * 80803430 08BC 0 4328 DCEOD BSI 3 40 BR TO MSG FORM 0 MC 80803440 | |
| ** | 0884 0 D30D 0885 0 43A8 | BSI 3 -88 BR TO READ SUB RT SC | 80802770 | 08BD 0 AEOD DC /AEOD MSAG # 80803440 | |
| | 0886 0 7018 | . MDX DMLE1 BR TO ERR RD RTN | 808 0 2780 | * 80803460 | |
| • | 0887 1 C400 0C57 | * LD L DCDA&2 GET SECOND DATA WORD | 8080279 0 80802800 | 08BE 0 1000 DCRND NOP 0 STOP NOP 80803470 08BF 0 30ED WAIT2 DC /30ED INIT_END WAIT 80803480 | |
| 1 | 0887 1 C400 0C57 | EOR DMLXT TEST FOR DIMAL IND | 80802810 | * SEE BEGINNING OF 80803490 | |
| | 088A 1 4C18 0896 | BSC L DMLIC, &- BR IF DIMAL PATTERN | 80802820 8 0 80283 0 | * LISTING FOR INST 80803500 08C0 0 70FD MDX DCRND WAIT BRANCH LOOP 80803510 | |
| £" | 088C 0 C3D8 | * LD 3 -40 GET BASIC CE ADDR | 80802840 | 08CO O 70FD MDX DCRND WAIT BRANCH LOOP 80803510 * * * 80803520 | |
| | 088D 0 EBF9 | OR 3 -7 SET IN CE SECT ADDR | 80802850 | *************************************** | |
| - | 088E 0 D30B 088F 0 43A8 | STO 3 11 SET ADDR IN CTRL TBL BSI 3-88 BR TO READ SUB RT SC | 8080286 0 80802870 | * LOST INTERRUPT RT | |
| | 0890 0 7012 | MDX DMLE2 BR TD ERR RD RTN | 8080288 0 | * \$080356 0 | |
| - | | * | 8080289 0 8080290 0 | 08C1 1 6700 0B88 DLNRT LDX L3 DCT SET X3 CTRL ADDR SE 80803570 08C3 0 C31B LD 3 27 GET TIMER CNT 80803580 | |
| (| 0891 1 C400 0 C57 0893 0 F3C7 | LD L DCDA&2 GET SECOND DATA WORD EOR 3-57 TEST FOR CE PACK IND | 80802900 | 08C4 0 83FF A 3 -1 ADD &1 TO CNT 80803590 | |
| | 0894 1 4C18 0869 | BSC L DCTL3, &- BR TO INIT IF CE IND SX | 808 0 292 0 | 08C5 0 D31B STO 3 27 SAVE NEW CNT 80803600 | |
| | 0004 1 6400 0005 | * DMLIC LD L SW3 GET SW 3 FUNCTION SX | 80802930 80802940 | 08C6 0 F31C EOR 3 28 TEST FOR LIMIT 80803610 08C7 0 4820 BSC Z Q. EQ TO LIMIT 80803620 | |
| <u> </u> | 0896 1 C400 0805 0898 1 4C28 0869 | BSC L DCTL3, Z& BR TD INIT IF NEG | 80802950 | 08C8 0 700B MDX DLNR1 NO, PROCEED 80803630 | |
| | | * * * * * * * * * * * * * * * * * * * | 80802960 | * 80803640 08C9 0 088A XID 3 -70 SENSE DSW 80803650 | |
| | 089A 0 4328 089B 0 AODC | BSI 3 40 BR TO MSAG FORM 0 MC DC /AODC MSAG # | 80802970 80802980 | 08CA 0 D308 | |
| 6 | 0078 G H080 | * | 80802990 | 08CB 0 43B1 BSI 3 -79 BR TO ERR MSAG RT SC 80803670 08CC 0 4334 BSI 3 52 BR TO MSAG FORM 2 MC 80803680 | |
| 6 | 089C 0 30CE · 089D 0 70F8 | WAIT1 DC /30CE WAIT FOR CE GD AHEAD MDX DMLIC LODP TO RE-CHECK | 80803000 80803010 | 08CC 0 4334 BSI 3 52 BR TO MSAG FORM 2 MC 80803680 08CD 0 E001 DC /E001 MSAG # 80803690 | |
| | · 0890 0 10F8 | * | 80803020 | 08CE 0 0000 . DC 0 NO ERROR LOOP ADDR 80803700 | |
| • | | * DINAL CIRL YINT | 80803030 80803040 | * 80803710 08CF 0 1010 SLA 16 CLEAR ACCUM 80803720 | |
| - | 089E O ABCD | DMLXT DC /A8CD DIMAL CTRL XTNT * | 80803050 | 08D0 0 D31B STO 3 27 CLEAR LOST NTRPT CTR 80803730 | |
| | | * | 80803060 | 08D1 0 438E BSI 3 -114 RELEASE RT SC 80803740 | |
| - | 089F 0 4334 | DMLE1 BSI 3 52 BR TD MSAG FORM 2 MC DC /E062 MSAG # | 80803070 80803080 | 08D2 0 4386 BSI 3 -122 BR TO RE-ZERO ARM SC 80803750 08D3 0 7098 MDX DCTL4 BR TO RE-TRY ROUTINE SX 80803760 | |
| (' | 08A0 0 E062 08A1 1 0880 | DC /E062 MSAG # DC DMLCK ERR LDOP ADDR | 80803090 | * 80803770 | |
| | 08A2 0 70F3 | MDX DMLIC BR TO CE CTRL WAIT | 80803100 | 08D4 0 C31D DLNR1 LD 3 29 GET NXT MLN ENTRY 80803780 08D5 1 4C18 08D8 BSC L DLAND, ε- BR 0 - NTRPT UCCURED 80803790 | |
| | 08A3 0 4334 | * DMLE2 BSI 3 52 BR TO MSAG FORM 2 MC | 80803110 80803120 | 08D7 1 6700 08C1 LDX L3 DLNRT GET LST NTRPT RT ADR 80803800 | |
| - | 08A4 0 E063 | DC /E063 MSAG # | 80803130 | 08D9 1 6F00 0809 STX L3 LIV SET IT IN MLSCF 80803810 08DB 0 4C80 012D DLAND BSC I START BR TO MONITOR XM 80803820 | |
| | 08A5 1 0880 | DC DMLCK ERR LOOP ADDR MDX DMLIC BR TO CE CTRL WAIT | 80803140 80803150 | 08 DB 0 4C80 012D DLAND BSC I START BR TO MONITOR XM 80803820 * 80803830 | |
| • | 08A6 0 70EF | MDX DMLIC BR TO CE CTRL WAIT | 80803160 | * \$0803840 | |
| | | * | 80803170 8080318 0 | ************************************** | |
| • | | ** * TEST RETURN CONTROL * | 80803190 | *************************************** | |
| - | • | * [*] | 80803200 | * 80803880 08DD 0 0000 DVA DC 0 DISK AREA CODE ID PM 80803890 | |
| 6 | 08A7 1 C400 0805 | * DCRTN LD L SW3 GET SW FNC 3 DATA SC | 80803210 . 8080322 0 | # 80803900 | |
| | 0847 1 0400 0005 | SRA 1 SHIFT TO CHECK 14 | 808 0 3230 | 08DE 0 0000 NTRPT DC 0 80803910 | |
| • | 08AA 1 4C04 08AD | BSC L DCRHM,E BR IF BIT 14 IS ON BSI 3-128 BR TO DCARM RT SC | 8080324 0 8080325 0 | 08DF 1 6700 0B88 LDX L3 DCT SET X3 CTRL ADDR SE 80803920 * 80803930 | |
| | 08AC 0 4380 08AD 1 C400 0803 | BSI 3-128 BR TO DCARM RT SC DCRHM LD L SW1 GET SW FNC 1 DATA | 80803260 | 08 E1 0 0BBA XIO 3 -70 SENSE RESET DSW 80803940 | |
| (| 08AF 1 4C20 0879 | BSC L DCTL5, Z BR IF FNC NOT ZERD | 80803270 | 08E2 0 D308 | |
| <i>y</i> - | 08B1 0 C319 | * LD 3 25 GET ROUTINE ID NUM | 8080328 0 8080329 0 | 08E3 0 C31D LD 3 29 GET RETURN ADDR 80803970 | |
| (| 08B2 0 F3FD | EOR 3 -3 TEST FOR LAST RT | 80803300 | 08E4 1 D400 080B | |
| | 08B3 1 4C20 0869 | BSC L DCTL3,Z BR TO CONTINUE TESTS | 8080331 0 8080332 0 | 08E6 1 4C18 08F0 BSC L NTRER, €- BR TO ERR RT IF ZERO 80803990 ★ 80804000 | |
| (| 08B5 1 7401 0BAO | * MDX L DCT&24,1 ADD TD PROG PASS CNT | 8080333 0 | 08E8 0 1010 NTRST SLA 16 CLR ACCUM 80804010 | |
| - | 08B7 0 1000 | NOP O SAFTY NDP | 80803340 | 08 E9 0 D306 STO 3 6 CLR FUNCTION 80804020 08 EA 0 D31B STO 3 27 CLR LST NTRPT CTR 80804030 | |
| | | * * | 80803350 80803360 | 08 EB 0 D31D STO 3 29 CLR NTRUPT ADDR DCT 80804040 | |
| • | 08B8 0 10 10 | SLA 16 CLR ACC | 80803370 | 08EC 1 D400 0809 STO L LIV CLR LST NTRPT RT XFR 80804050 * 80804060 | |
| (| 08B9 0 D319 | STD 3 25 CLR RT ID NUMBER | 80803380 80803390 | 08EE 1 4C80 08DE NTRXT BSC I NTRPT EXIT TO MONITOR SX 80804070 | |
| • | . 08BA 0 4350 | BSI 3 80 BR TD MSAG FORM 4 MC | 8080340 0 | * 8080408 0 | |
| - | 08B8 0 A001 | DC /A001 MSAG # | 808 0 341 0 | 08F0 0 70FF NTRER MDX NTRER NO ML MLSCF ADDR PH 80804090 | |
| 1 | | | | | |
| 1 | • | | DDOC 10 0000 1 | ATE 28FEB66 01MAY66 01JUL66 04NOV66 01OCT67 01NDV67 02DEC68 PROG ID 0 | 0808-1 |
| ζ. | DATE 28FE866 01MAY | | PROG ID 0808-1 PAGE 3 | C NO. 415120 415120A 415178 415233 411875 411875A 411961 PAGE | 3A |
| E. | EC ND. 415120 415120 | JA 415178 415255 411675 411675A 411701 | J | | |

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|---------------------------------|------------|----------------------|---|------|----------------------|
| | | | * * | | 80804100 |
| | * | READ | | | 80804110 |
| | * | AAAAAAAAA | ************************************** | | 80804120 80804130 |
| | * | | * | | 80804140 |
| | * | | * | | 80804150 |
| 08F1 0 0000 | RWACK DC | 0 | ENTRY | | 80804160 |
| 08F2 1 C400 0EA4 | | L CYLEX | GET CYL ERR CNT | SE | 80804170 |
| 08F4 1 4C18 08FF | | L RWCKX,&- | BR OUT IF ZERO | | 80804180 |
| 08F6 1 6580 0EA4 | | II CYLEX | GET LOOP COUNT | | 80804190 |
| 08F8 1 C500 0EB7 08FA 0 F30B | | L1 CYLET-1 | GET LAST AOOR | | 80804200 |
| 08FB 1 4C18 0901 | EOR BSC | 3 11 L RWCKT,&- | TEST AGAINST OESIREO | | 80804210 |
| 08F0 0 71FF | MDX | 1 -1 | BR IF EQ BAO AOOR OEC CTRL | | 80804220 |
| 08FE 0 70F9 | MOX | RWCKA | LOOP | | 80804230 |
| | * | NII ONA | 2007 | | 80804240 80804250 |
| 08FF 1 4C80 08F1 | RWCKX BSC | I RWACK | EXIT TO CALL RT | SX | 80804260 |
| | * | | | • // | 80804270 |
| 0901 0 43B1 | RWCKT BSI | 3 -79 | BR TO ERR MSAG RT BR TO MSAG FORM 2 | SC | 80804280 |
| 0902 0 4334 | BSI | 3 52 | | MC | 80804290 |
| 0903 0 E004 0904 0 0000 | 0 C | /E 004 | MSAG # | | 80804300 |
| 0904 0 0000 | 0C * | 0 | NO ERR LOOP AOOR | | 80804310 |
| 0905 0 C319 | LD | 2 25 | CET DI EMEG NUMBER | | 80804320 |
| 0906 0 F3FD | | 3 25 3 - 3 | GET RT EXEQ NUMBER TEST FOR RT 3 | | 80804330 |
| 0907 1 4C18 0916 | | L RWRT3,&- | | cv | 80804340 |
| | * | - 111111374 | DK 10 3ET KT 3 KETKN | 34 | 80804350 80804360 |
| 0909 0 C30B | LD | 3 11 | GET CURRENT ADOR | | 80804370 |
| 090A 0 1803 | SRA | 3 | SHIFT RIGHT HO-SECT | | 80804380 |
| 090B 0 1003 | SLA | 3 | 2011 FELL MD-2601 | | 80804390 |
| 090C 1 4C18 08A7 090E 0 93F8 | | . DCRTN,&- | | | 80804400 |
| 090F 0 EBF9 | \$ | 3 -8 | OEC DISK AODR BY 1 | | 80804410 |
| 0910 0 D30B | | 3 - 7 3 11 | SET HI SECT ADDR | | 80804420 |
| 0911 1 6580 0E31 | | 1 FO2XB | SET IN OESIRED ADDR GET CURRENT CTRL CNT | | 80804430 |
| Q913 0 71F9 | | 1 -7 | OEC FOR ONE TOT CYL | | 80804440 80804450 |
| √ 914 1 6400 0E17 | | F02AC&5 | | Sx | 80804460 |
| | * | | _ | | 80804470 |
| 0916 0 4328 | | 3 40 | BR TO MSAG FORM O | MC | 80804480 |
| 0917 0 E077 | OC . | /E077 | MSAG # | | 80804490 |
| 0918 0 0000 | 0C | 0 | NO ERR LOOP AODR | | 80804500 |
| 0919 0 4396 | | 3 -106 | DD TO HOLITON THE | | 80804510 |
| 0,1,0 | ********* | | | PΧ | 80804520 |
| | * | | ************************************** | | 80804530 |
| | * | | ************************************** | | 80804540 80804550 |
| | * | | * | | 80804560 |
| 091A 0 7004 | DCWR MDX | OCW 10 | BR / NOP SWITCH | | 80804570 |
| 0010 0 4000 | * | | | | 80804580 |
| 091B 0 40D5 | BSI | RWACK | | SC | 80804590 |
| 091C 0 1010 0910 0 D3E0 | SLA | 16 | CLEAR A REG | | 80804600 |
| 091E 0 D3DE | | 3 -32 3 -34 | RESET SOFT RD ERR | | 80804610 |
| 0,12 0 0,00 | * 210 | 3 -34 | RESET HARD RD ERR | | 80804620 |
| | * | | | | 80804630 |
| 091F 0 C323 | DCW10 LD | 3 35 | GET WRITE FUNCTION | | 80804640 80804650 |
| 0920 0 D306 | | 3 6 | SET IT IN DCT | | 80804660 |
| 0921 0 D3DF | | 3 -33 | MEM FNC HOLOER | | 80804670 |
| 0922 0 C30B | | 3 11 | GET OESIREO AODR | | 80804680 |
| 0923 1 D400 OC56 | STO L | DCDA&1 | SET IT IN I/O AODR | | 80804690 |
| 0925 0 406C | * | COTOT | OUN | | 80804700 |
| 0723 U TUUL | 8S I * | COTRT | CMN OATA XFER RT | | 80804710 |
| 0926 1 7401 0899 | T MOX L | OCT&17,1 | AOO TO TOTAL WR CTR | | 80804720 |
| 0928 0 1000 | NOP | 001417,1 | SAFTY NOP | | 80804730 80804740 |
| | * | • | Vn. 11 1101 | | 80804740 80804750 |
| 0929 1 4400 09BB | BSI L | CDTSN | BR TO CK OSW | | 80804750 |
| 0928 0 7002 | MOX | DCWEL | WRITE ERR BR RETURN | | 80804770 |
| | | | | | |

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|------------------|---------------------|---------------------------|--|---------------------------|
| 092C 1 7401 0B33 | * | I OUD 1 | | 80804780 |
| 092E 0 C315 | OCWEL LO | L OWR + I | A00 TO EXIT RTN OK | |
| 092F 0 830E | Α. | 3 21 | GET TOT HRO WR ERRS | 80804800 |
| 0930 0 D315 | A S T O | 3 -34 | AOO NEW HRO ERRS | 80804810 80804820 |
| 0931 0 C314 | 310 | 3 21 | AOO NEW HRO ERRS SAVE NEW TOTAL GET TOT SFT WR ERRS AOO NEW SFT ERRS | 80804820 |
| 0932 0 83E0 | LO | 3 20 | GET TOT SET WE ERRS | 80804830 |
| 0933 0 D314 | A | 3 -32 3 20 | AOO NEW SFT ERRS | 80804840 |
| 0,55 0 0514 | \$TO | 3 20 | SAVE NEW TOTAL | 80804850 |
| 0934 1 4C80 0B33 | * OCWBB BSC | 7 0110 * | | 80804860 |
| 0754 1 4000 0055 | * | 1 OWR | EXIT TO CALL RT | |
| | | | * | |
| • | ******* | •••••• | *************** | |
| | * | 012K | REAO ROUTINE * | 80804900 |
| | * | • • • • • • • • • • • • • | ***************** | |
| 0936 0 7001 | | 00010 | * | 00004920 |
| 0730 0 1001 | OCRO MOX | OCR10 | BR / NOP SWITCH | SE 80804930 |
| 0937 0 4089 | | D114 C11 | | 80804940 |
| 0737 0 4089 | BSI | RWACK | RO/WR AOOR CK RT | SC 80804950 |
| 0938 0 1010 | * OCR10 SLA STO STO | | | 80804960 |
| 0939 0 03E0 | OCKIO SLA | 16 | CLEAR A REG | 80804970 |
| 093A 0 030E | 210 | 3 -32 | RESET SOFT RO ERR | 80804980 |
| 0938 0 D3EB | 510 | 3 -34 | RESET HARO RO ERR | 80804990 |
| 093C 0 C324 | | 3 -21 3 36 | RESET RD-SK SW 1 GET READ FUNCTION | 80805000 |
| 093D 0 D306 | 0CR12 L0 | 3 36 | GET READ FUNCTION | 80805010 |
| 093E 0 D3DF | STO STO | J 0 | SEL LL IN OCT | 80805020 |
| 093F 0 C31A | | 3 -33 | MEM FNC HOLOER | 80805030 |
| 0940 1 4030 0945 | LD 0.5.0 | 3 26 | GET RO / RO-CK MOO BR BY AOOR CLR IF & | 80805040 |
| 0942 0 1010 | | L DCR16,Z- | BR BY AOOR CLR IF & | 80805050 |
| 0943 1 D400 0C56 | SLA | 10 | LLR ACC | 80805060 |
| 0713 1 0400 0030 | * | L DCOA&1 | CLR READ I/O AOOR | 80805070 |
| 0945 0 404C | DCR16 BSI | COTOT | | |
| 0712 0 4040 | * | CDTRT | CMM DATA XFER RT | |
| 0946 1 7401 OB9A | | 1 007010 1 | | 80805100 |
| 09 48 0 1000 | N O P | L 0CT&18,1 | | 80805110 |
| 0710 0 1000 | * | 0 | SAFTY NOP | 80805120 |
| 0949 0 406E | | CDTCN | | 808051 30 |
| 094A 0 703F | BSI | CDTSN | BR TO CK DSW & OPCMP | SC 80805140 |
| 074A 0 103F | MDX * | OCREL | REAO ERR BR RETURN | 80805150 |
| 094B 1 C400 0C56 | | | | 80805160 |
| 094D 0 D30C | LO STO | L OCOA&1 | GET ACTUAL AOOR | 808 0 51 70 |
| 094E 0 F30B | | 3 12 | SET ADOR IN DCT CK ACTUAL EQ DESIRED | 80805180 |
| 094F 1 4C18 097D | EOR | 3 11 | CK ACTUAL EQ DESIRED | 80805190 |
| 07 H 1 4C18 097D | B S C | L OCRGA,&- | BR IF AODR IS OK | 80805200 |
| 0951 O C3EB | | 2 01 | | 80805210 |
| 0952 1 4010 0965 | LO BSC | 3 -21 | GET SW 1 | 8080522 0 |
| 0,52 1 (010 0,05 | # | L DCR21,- | BR IF NOT 3RO RE-RO | 80805230 |
| 0954 0 CO26 | | 00051 | 057 | 80805240 |
| 0955 0 F026 | LD E OR | OCRE1 | GET FIRST EOO8 AAR | 80805250 |
| 0956 1 4C20 0961 | | 0CRE2 | COMP 2ND EOO8 AAR | 80805260 |
| 0,50 1 1020 0,01 | * B3C | L 0CR20,Z | BR IF E008 ROS UNEQ | 808052 7 0 |
| 0958 0 4334 | BSI | 3 FORM2-OCT | DD TO MOLO FORM | 80805280 |
| 0959 0 E009 | 00 | /E 009 | | MC 80805290 |
| 095A 1 0936 | DC | D 0 - D | MSAG # | 80805300 |
| 2 0,50 | * | DCRD 🥫 | ERROR LOOP AOOR | 8080531 0 |
| 0958 0 1010 | SLA | 16 | CL E 1 D 1 D E C | 80805320 |
| 095C 0 D3E0 | STO | 3 -32 | CLEAR A REG | 80805330 |
| 095D 1 7401 0B9B | | L OCT & 19,1 | RESET SOFT RD ERR | 80805340 |
| 095F 0 1000 | NOP | 0 | AOD ONE TO RESK ERR | 80805350 |
| | * | · · | SAFTY NOP | 80805360 |
| 0960 0 7029 | MDX | OCREL | BO EDD OD DETUDA | 80805370 |
| · | * | OUNLL | RO ERR BR RETURN | 80805380 |
| 0961 0 4334 | OCR20 BSI | 3 FORMS-OCT | PD TO MOVE COOK O | 80805390 |
| 0962 0 E015 | 0C K 20 B 3 I | 3 FORM2-OCT /E015 | | MC 80805400 |
| 09 63 1 0936 | 00 | 0CR0 | MSAG # | 80805410 |
| 0964 0 70FB | MDX | | ERROR LOOP AODR | 80805420 |
| | * | DCR19 | RD ERR BR RETURN | 80805430 |
| 0965 0 4334 | DCR21 BSI | 3 FORM2-OCT | BP TO MEAC CODE 3 | 80805440 |
| | UJI | 2 1 OKTIZ =00 I | BR TO MSAG FORM 2 | MC 80805450 |
| | | | | |
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| 0966 0 E008 | | DC | | /E 008 | MSAG # | | 80805460 |
|--|-----------|------------------|-----|---------------------|--|----|--|
| 0967 0 0000 | | DC | | 0 | NO ERROR LODP ADDR | | 80805470 |
| 0968 0 C3E 8 | * | LD | 3 | -21 | GET SW 1 | | 8080548 0 8080549 0 |
| 0969 1 4020 0973 | | | | | BR IF 2ND E008 PASS | | 80805500 |
| | * | | | | 3 1. 2 2000 | | 80805510 |
| 096B 0 C30C | | LD | 3 | 12 | GET IST AAR OF E008 | | 80805520 |
| 096C 0 D00E | | STO | | DCRE1 ' | SAVE IT | | 80805530 |
| 096D 0 C3CD | DC R 22 | | | -51 | GET 4000 HEX | | 80805540 |
| 096E 0 D3EB | * | STO | 3 | -21 | SET SW 1 TO & DR - | | 80805550 |
| 096F 0 C3ED | ~ | LD | 2 | ~32 | GET SFT RD TEMP CNT. | | 80805560 8080557D |
| 0970 0 83FF | | A . | | -32 -1 | ADD ONE TO ERROR CNT | | 80805570 8080558 0 |
| 0971 0 D3E0 | | STO: | | -32 | SAVE NEW COUNT | | 8080559D |
| | * | | | | | | 80805600 |
| 0972 0 7 0 C9 | | MDX | | DCR12 | BR TO RE-READ ADDR | | 808056 10 |
| 0072 0 0200 | * | | _ | | 057 310 110 05 5 000 | | 8080562 0 |
| 0973 0 C30C 0974 0 D007 | DCR23 | STO | 3 | 12 DCRE2 | GET 2ND AAR OF E008 SAVE IT | | 80805630 8080564D |
| 0975 0 4386 | | BSI | 3 | -122 | BR TD RE-ZERO ARM & | sc | 8080565 0 |
| | * | 50. | _ | | RE-SEEK DESIRED ADR | 00 | 80805660 |
| 0976 1 74 0 1 0B98 | | MDX L | _ | DCT&19,1 | ADD DNE TO RESK ERR | | 808 0 567D |
| 0978 0 1000 | | NOP | | 0 | SAFTY NDP | | .80805680 |
| 0070 0 0305 | * | | _ | , - | CET COOK HEY YENT | | 80805690 |
| 0979 0 C3BF 097A 0 70F3 | | LD MDX | 3 | -65 DCR22&1 | GET 80 00 HEX XTNT BR TO SET SW 1 | | 80805700 |
| 091A 0 1,013 | * | MUX | | DCKZZGI | DK 10 3E1 3# 1 | | 80805 71D 80805 720 |
| 0978 0 0000 | DCRE1 | DC | | 0 | E 0 08 AAR 1 | | 808 0 573 0 |
| 097C 0 0000 | DCRE2 | | | 0 | E008 AAR 2 | | 808 0 574 0 |
| | * | | | | | | 808 0 5750 |
| 097D 0 C3EB | DC R GA | | | -21 | GET SW1 | | 808 0 576 0 |
| 097E 1 4C10 0985 | | | ٠, | DCROK,- | BR IF RD ADDR OK | | 8080577D |
| 0980 0 C3E0 0981 0 93FE | | LD S | | -32 -2 | GET SFT RD ERR TEMP COUNT & CORRECT IT | | 8 0 8 0 578 D 8 0 8 0 5790 |
| 0982 0 D3E0 | | | | -32 | SAVE CORRECTED CNT | | 80805800 |
| | * | • • • | _ | 3.2 | | | 80805810 |
| 0983 0 4328 | | BSI | 3 | FD RMO-DCT | BR TD MSAG FORM O | MC | 8 0 80582 0 |
| 0984 0 A004 | | DC | | /A004 | MSAG # | | 808 0 583 0 |
| 0005 1 7/01 0000 | * | | | 0.00 | 100 TO EVIT OF OV | | 8080584 0 |
| 0985 1 7401 0830 0987 0 C30C | DCRDK | | | 0RD,1 12 | ADD TO EXIT RT OK GET ACTUAL DISK ADDR | | 808 0 585 0 |
| 0988 0 D30A | | STO | | 10 | SET IT IN DCT PRESNT | | 8080586 0 808058 70 |
| 09 89. 0 D309 | | | 3 | | SET IT IN LAST GOOD | | 8080588D |
| 098A 0 C317 | DCREL | LD | 3 | 23 | GET TOTL HRD RD ERRS | | 808 0 589 0 |
| 098B 0 83DE | | | | -34 | ADD NEW HRD ERRS | | 8080590 0 |
| 098C 0 D317 | | STO | | 23 | SAVE NEW TOTAL | | 8080591D |
| 098D 0 C316 098E 0 83E0 | | LD A | | 22 -32 | GET TOT SFT RD ERRS ADD NEW SFT ERRS | | 80805920 |
| 098F 0 D316 | | | | 22 | SAVE NEW TOTAL | | 808 0 593 0 808 0 5940 |
| 0,0, 0 031 0 | * | 0.0 | _ | | onte nen total | | 808 0 595 0 |
| 0990 1 4C80 0B30 | | | | | EXIT TO CALL RT | SX | 80805960 |
| | * | | | | · · · · · · · · · · · · · · · · · · · | | 80805970 |
| | * | | | | | | 808 0 598 0 |
| | ***** | • • • • • • | • • | • • • • • • • • • • | * | | 80805990 |
| 0992 0 0000 | CDTRT. | DC | | 0 | ENTRY | | 80806000 80806010 |
| 0993 0 1010 | 50 i K 1, | | | 16 | CLR ACC | SE | 8 0 8 0 6020 |
| 0994 0 D30E | | | | 14 | CLR RETRY CTR | | 8080 6030 |
| | * | | | | | | 80806040 |
| 0995 0 4388 | CDTBC | BSI | 3 | -120 | DCRDY RT | SC | 80806 0 5 0 |
| 0004 0 0300 | * | | 2 | 1.2 | CET HORD COUNT | | 80806060 |
| | | | | 13 DCDA | GET WORD COUNT SET IT IN I/O FLD | | 80806070 |
| 0996 0 C30D | | JIU L | | -33 | GET MEM HLD FNC | | 8 0 806 0 80 808 0 609 0 |
| 0997 1 D400 OC55 | | LD | | | | | |
| - | | | | 6 | SET IT IN DCT FNC WD | | 80806100 |
| 0997 1 D400 0C55 0999 0 C3DF 099A 0 D306 | • | STO | 3 | 6 | | | |
| 0997 1 D400 OC55 0999 0 C3DF 099A 0 D306 099B 0 C30B 099C 0 100D | • | STO LD SLA | 3 | 6 11 13 | SET IT IN DCT FNC WD GET DESIRED ADDR CLR CYL NUMBER | | 80806100 8080611D 8080612D |
| 0997 1 D400 OC55 0999 0 C3DF 099A 0 D306 099B 0 C30B | • | STO LD | 3 | 6 11 | SET IT IN DCT FNC WD GET DESIRED ADDR | | 8 0 8061 00 8080611 D |
| 0997 1 D400 OC55 0999 0 C3DF 099A 0 D306 099B 0 C30B 099C 0 100D | | STO LD SLA | 3 | 6 11 13 | SET IT IN DCT FNC WD GET DESIRED ADDR CLR CYL NUMBER | | 80806100 8080611D 8080612D |

| | | ٠ | | | | | | | | | |
|---|--------------------------------|-------------|------------------------------|---------------|-------|-------------------|---|-----------------|--|------------|--|
| | 099E | | | | | DR | | 26 | RD/RD CK MODIFIER | | 80806140 |
| | 099F | | | | | STO | | 7 | SET ADJ MOD IN DCT | | 80806150 |
| | 09 AO | 0 | C301 | | | LD STO | 3 | 4 | GET I/O ADDR | | 80806160 |
| | 09A1 | U | U3U4 | • | * | 310 | 3 | 4 | SET IT IN DCT | | 80806170 |
| | 09A2 | ^ | 4303 | | CDTRC | 9 C T | 2 | -11D | DCDSW RT | SC | 80806180 8080619 0 |
| | USAZ | U | 4372 | | *. | D 2 I | 3 | -110 | DCD3# KI | 36 | 80806200 |
| | 09A3 | 0 | E3C5 | • | • | AND | 3 | -59 | TEST BITS | | 80806210 |
| | 09A4 | | | 09AD | | BSC | L | CDTSE,&- | BR ZERO TO CONTINUE | | 80806220 |
| | • • • • • | - | | | * | | _ | | | | 80806230 |
| | 09 A6 | 0 | 43B1 | | | BSI | 3 | -79 | BR TO ERR MSAG RT | SÇ | 80806240 |
| | 09A7 | 0 | 432E | | | BSI | 3 | 46 | BR TO MSAG FORM 1 | MC | 80806250 |
| | 8A 90 | | | | | DC | | /E 005 | MSAG # | | 80806260 |
| | 0949 | 1 | 09A2 | | | DC | | CDTRC | ERR LDDP ADDR | | 80806270 |
| | | _ | 0004 | | * | v.1.0 | _ | 7.0 | CENCE SECET SCH | | 80806280 |
| | 0944 | | | | | XIO | | - 70 | SENSE RESET DSW SET DSW IN DCT | | 808 0 629 D |
| | 09 AB 09AC | | | | • | STO BSI | | 8 -106 | BR TO MONITOR END | SX | 80806300 8080631 0 |
| | USAC | U | 4370 | | * | D31 | 3 | -100 | BK TO MONTTOK END | 31 | 80806320 |
| | 09AD | ο | C 387 | | CDTSE | I D | 3 | -73 | GET RETURN ADDR | | 80806330 |
| | 09 AE | | | | 00.02 | STO | | 29 | SET IT IN DCT | | 8080634 0 |
| | | • | | | * | | _ | | | | 80806350 |
| | 09 AF | 0 | 4382 | | | BSI | 3 | -126 | BR TO EXEQ RT | SC | 808 0 63 6 0 |
| | | | | | * | | | | | | 80806370 |
| | 09 BO | 0 | 439C | | | BSI | 3 | -100 | MONITOR START RT | ΧM | 80 806380 |
| | | | | | * | - | | | | | 8080639 0 |
| | | | 6700 | 0B88 | CDTNR | | | DCT | SET X3 CTRL ADDR | SE | 80806400 |
| | 09B3 | | | | | LD | | 0 | GET ZERO XTNT | | 80806410 |
| | 09 B 4 | U | 0307 | | .4. | STO | 3 | 7 | CLR MDDIFIER | | 808 0 642 0 |
| | 0005 | ^ | | | * | 0.01 | - | 1.17 | RELEASE RT | sc | 8080643 0 |
| | 0 985 | U | 4300 | | * | 851 | 2 | -1 14 | KELEASE KI | 36 | 8080644 0 808 0 645 0 |
| | 0086 | 1 | 4C 80 | 0002 | T | BSC | I | CDTRT | EXIT TO CALL RT | \$ X | 80806460 |
| | U > D O | + | 7C 0 0 | 0772 | * | 530 | • | COTICT | * | 37 | 808 0 64 70 |
| | | | | | * | * * * | | ** CHE | ECK DSW RD/WR ** * | | 8080648 0 |
| | | | | | * | | | | * | | 8080649 0 |
| | 0988 | 0 | 0000 | | CDTSN | DC | | 0 | ENTRY | | 808065 00 |
| | 0989 | 0 | C308 | | | LD | | 8 | GET DSW IN DCT | SE | 80806510 |
| | 09 BA | | | | | AND | | | PASS TEST BITS | | 80806520 |
| | 0988 | | | | | EOR | | -51 | TEST ALL FOR OK | | 808065 30 |
| | 09 BC | 1 | 4C18 | 09DA | | BSC | L | CDTGX,&- | BR ZERO ALL OK | | 8080654 0 |
| | 00 BE | , | C400 | 0054 | * | LD | L | DCDA&1 | GET ACTUAL ADDR | | 8 0 80655 0 808065 6 0 |
| | 0900 | | | 0000 | | STO | | 12 | SET ADDR IN DCT TBL | | 80806570 |
| | 0,00 | J | 0300 | | * | 3.0 | , | 16 | SET ADOR IN DOT THE | | 80806580 |
| | 09C1 | 0 | 4381 | | | BSI | 3 | -79 | BR TO ERR MSAG RT | SC | 8080659D |
| | 09C2 | | | | | BSI | 3 | 52 | BR TD MSAG FDRM 2 | MC | 80806600 |
| | 0903 | 0 | E006 | | | DC | | / E00 6 | MSAG # | | 80806610 |
| | 0 9C4 | 0 | 0000 | | | DC | | 0 | NO ERR LODP ADDR | | 8080662 0 |
| | | | | | * | | | | | | 80806630 |
| | | | C400 | | | LD | L | ZM3 | GET SW FNC 3 DATA | | 80806640 |
| | | | 4804 | | | BSC | | E | SKIP IF EVEN | | 80806650 |
| | 09 C 8 | U | 1015 | | * | MDX | | DSPLA | BR TO DISPLAY IDA RT | | 80806660 |
| | 00.00 | 1 | 7401 | | CDTLK | MDA | L | DC T-32,1 | ADD TO SFT ERR HDLDR | | 808 0 66 70 808 0 668 0 |
| | 09CB | | | 0000 | CDILK | NOP | _ | 0 | SAFTY NDP | | 8080669 0 |
| | 09CC | | | | | LD | 3 | 14 | GET ERR TRY CTR | | 80806.70 0 |
| | 09CD | | | | | A | | -1 | ADD TO TRY CTR | | 80806 710 |
| | 09 CE | | | | | STD | | 14 | SAVE CTR TDTAL | • | 80806720 |
| | 09CF | | | | | EDR | 3 | -10 | TEST FOR TENTH TRY . | | 80806730 |
| | | | 4C 20 | 0995 | | BSC | L | CDTBC,Z | LOOP TO RETRY AUTD | | 80806 740 |
| | 09 DO | 1 | | | * | | | | | | 80806 7 5 0 |
| | | | | | | | L | DCT-34,1 | ADD TO HRD ERR HOLDR | | 0.0.0.0.4.74.0 |
| | 0 9 D 2 | 1 | 7401 | 0866 | | MDX | _ | | | | 8080676 0 |
| • | | 1 | 7401 | 0B 66 | | MDX NOP | _ | 0 | SAFTY NDP | | 80806770 |
| • | 0 9 D2 09D4 | 1 0 | 7401 1000 | 0 <u>B</u> 66 | * | NOP | | 0 | SAFTY NDP | sc | 80806770 8080678D |
| • | 09 D2 09D4 09D5 | 1 0 0 | 7401 1000 4381 | 0B 66 | * | NOP BSI | 3 | 0 -79 | SAFTY NDP BR TO ERR MSAG RT | SC M.C. | 80806770 8080678D 8 0 80679 0 |
| | 09 D2 09D4 09D5 09 D6 | 1 0 0 | 7401 1000 4381 432E | 0В 66 | * | NOP BSI BSI | 3 | 0 -79 46 | SAFTY NDP BR TO ERR MSAG RT BR TO MSAG FDRM 1 | SC MC | 80806770 8080678D 80806790 808068D0 |
| | 09 D2 09D4 09D5 | 1 0 0 | 7401 1000 4381 432E | 0B 66 | * | NOP BSI | 3 | 0 -79 | SAFTY NDP BR TO ERR MSAG RT | | 80806770 8080678D 8 0 80679 0 |
| | 09 D2 09D4 09D5 09 D6 | 1 0 0 | 7401 1000 4381 432E | 0B 66 | * | NOP BSI BSI | 3 | 0 -79 46 | SAFTY NDP BR TO ERR MSAG RT BR TO MSAG FDRM 1 | | 80806770 8080678D 80806790 808068D0 |

28FEB66 01MAY66 01JUL66 04NOV66 01DCT67 01NOV67 02DEC68

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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2315 OISK INITIALIZER

PART ND. 2196374 PAGE 6A

| 0A13 1 4C04 0A1A | 8 S C | L DSKBT,E | 8R TD TEST B10 COND | 80807500 |
|---------------------------------|----------------|-------------------|-----------------------------------|---|
| 0A15 0 43B1 | 881 | 3 -79 | 00 TO 500 HG10 07 | 80807510 |
| 0.125 0 .352 | * | 3 -19 | BR TO ERR MSAG RT | SC 80807520 |
| 0A16 0 432E | BSI | 3 46 | BR TO MSAG FORM 1 | 80807530 MC 80807540 |
| 0A17 0 E040 | DC | /E040 | MSAG # | 80807550 |
| OA18 O 0000 | DC | 0 | NO ERR LDDP ADDR | 8080756 0 |
| 0A19 0 70F4 | MDX | DSKBB-2 | BR TD FINISH SUBRT | 80807570 |
| | * | | | 80807580 |
| OALA O OBBA | OSKBT XIC | | SENSE-RESET OSW | 80807590 |
| 0A1B 0 0BBA | XID | | DO IT AGAIN | 80807600 |
| 0A1C 0 1805 0A10 1 4C04 0A24 | SRA | | . SHIFT TO TEST BIT 10 | 80807610 |
| 0A10 1 4C04 0A24 | 8 S C | L DSKIS,E | BR IF 810 STILL DN | 80807620 |
| 0A1F 0 43B1 | OSKIA BSI | 3 -79 | BR TO ERR MSAG RT | 80807630 |
| | * | | DR TO ERR MSAG RT | SC 80807640 |
| 0A20 0 4334 | BSI | 3 52 | BR TO MSAG FDRM 2 | 808 07 65 0 MC 808 07 660 |
| 0A21 0 E041 | OC | /E041 | MSAG # | 80807670 |
| 0A22 0 0000 | - DC | 0 | NO ERR LODP AODR | 80807680 |
| | * | | INVALID ADDR SEL | 80807690 |
| 0A23 0 4396 | BSI | 3 -106 | RETURN TD MONITOR | PX 80807700 |
| 0A24 0 43B1 | * | | | 80807710 |
| UA24 U 4381 | DSKIS BSI * | 3 -79 | BR TO ERR MSAG RT | SC 80807720 |
| 0A25 0 432E | # BSI | 3 46 | DD TO MSAG 5000 | 80807730 |
| 0A26 0 E042 | DC DS 1 | /E042 | BR TO MSAG FORM 1 MSAG # | MC 80807740 |
| 0A27 1 09EE | DC | DC SK | ERR LOOP ADDR | 80807750 |
| 0A28 0 4386 | BSI | 3 -122 | BR TO RESTORE ARM RT | 80807760 SC 80807770 |
| OA 29 0 4399 | BSI | 3 -103 | BR TO CTRL COUNT RT | SC 80807770 |
| | * | | an va and about Ki | 80807790 |
| 0A2A 0 C30A | DSK13 LD | 3 10 | GET PRESENT ADDR | 80807800 |
| 0A2B 0 1803 | SRA | 3 | CLEAR HD-SECT | 80807810 |
| 0A2C 0 0302 | STO | | SAVE FOR CALC | 80807820 |
| 0A2O O C3OB 0A2E O 18O3 | LO. | 3 11 | GET DESIRED AOOR | 80807830 |
| 0A2F 0 9302 | SRA | 3 | CLEAR HO-SECT | 80807840 |
| 0A30 1 4C18 0A10 | S BSC | 3 2 L DSKBΒ,&- | CALC INCREMENT | 80807850 |
| 5.010 UAIU | * | L DSKDD•4- | BR RETURN IF ZERO | 80807860 |
| 0A32 1 4C08 0A3A | BSC | L D13HM,& | BR IF INCR NEGATIVE | 80807870 80807650 |
| | * | | SK II INOK REDATIVE | 80807890 |
| 0A 34 0 0302 | STO | 3 2 | SAVE INCREMENT | 80807900 |
| 0A35 0 0304 | \$T O | 3 4 | SAVE INCREMENT | 80807910 |
| 0A36 0 C321 | LO | 3 33 | GET INST /X400 | 80807920 |
| 0A37 0 0306 | 013MR STO | 3 6 | SET IT IN OCT | 80807930 |
| OA 38 1 4COO OAO1 | BSC * | L OSKEE | BR TO MAIN LINE SEEK | |
| 0A3A 0 C30B | 013HM L0 | 3 11 | CET OFCIDED ADDO | 80807950 |
| 0A3B 0 1803 | SRA | 3 | GET OESIRED ADDR CLEAR HD-SECT | 80807960 |
| 0A3C 0 0302 | STO | 3 2 | SAVE FOR CALC | 808 07970 8 0 807980 |
| 0A30 0 C30A | LO | 3 10 | GET PRESENT ADOR | 80807990 |
| 0A3E 0 1803 | SRA | 3 | CLEAR HD-SECT | 80808000 |
| 0A3F 0 9302 | S | 3 2 | CALC INCREMENT | 80808010 |
| 0A40 0 0302 | STO | 3 2 | SAVE INCREMENT | 80808020 |
| 0A41 0 D304 | STO | 3 4 | SAVE INCREMENT | 80808030 |
| 0A42 0 C322 0A43 0 70F3 | LD | 3 34 | GET INST /X404 | 8 080 804 0 |
| 0443 0 7073 | MDX ≉ | 013MR | BR FOR MAINLINE RTRN | 80808050 |
| • | * | | | 80808060 |
| • | * | | ÷ * | 80808070 |
| • | * | CHANN | VEL BUSY RDUTINE * | 80808080 |
| <u>·</u> | * | | *************************** | 80808090 80808100 |
| | * | | * | 80808110 |
| 0A44 1 6700 OADF | CHNBZ LDX | L3 CHNRQ | GET CHNRQ ADDR | SE 80808120 |
| 0A46 1 6F00 080B | STX | L3 MLN | SET IT IN MLSCF | 80808130 |
| 0A48 0 4C80 0120 | BSC | I START | EXIT TO MONITOR | SX 80808140 |
| | * | | * | 80808150 |
| | *•••••• * | •••••••••• | ON MCAO 2000 | .80808160 |
| | T | COMM | * TA LOA MUN BAZM NO | 80808170 |
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PAGE

PART NO. 2196374 IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM PART NO. 2196374 IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM PAGE PAGE 2315 DISK INITIALIZER 2315 DISK INITIALIZER 80808860 DISK CHECK & SW RTN A OR C * 80808180 *•••• 80808870 80808190 80808880 *.... ADJ FOR MSAG NUM 80808200 EMNRT MDX L EMF,1 OA4A 1 7401 0B39 ADSKC DC 0 ENTRY 80808890 OA82 O 0000 GET BASIC MSAG NUM 80808210 LD I EMF OA4C 1 C480 OB39 XIO 3 -68 GET DSK DSW 80808900 0A83 0 0BBC 80808220 AND 3 -60 PASS VALIO BITS 0A4E 0 E3C4 CK 8IT 13 FOR TYPE SLA 13 80808910 0484 0 1000 ADD IN RD / WR CODE 80808230 A 3 -33 0A4F 0 83DF BSC I ADSKC .-BR RTRN IF DSK A 13 80808920 0A85 1 4C90 0A82 STO I EMF SET IT IN MSAG RT 80808240 OA50 1 0480 0B39 MDX L ADSKC,1 ADV FOR RETURN 80808930 0A87 1 7401 0A82 ADJ FOR RETURN ADDR 80808250 0A52 1 74FF 0B39 MDX L EMF,-1 BSC I ADSKC, ZE BR RTRN IF DSK A 44 80808940 OA89 1 4CA8 OA82 BSC I EMF RETURN TO CALL RT 80808260 OA54 1 4C80 OB39 80808950 80808270 *....* 80808960 80808280 FAR ARM TO HOME RT * 80808970 80808290 13 SD DCARM ROUTINE 80808980 80808300 80808990 80808310 *.... BR TO 13/44 DRTN SEC 80809000 DCARM BSI L ADSKC 0A8B 1 4400 0A82 80808320 DHOME LD 3 -1 STO 3 2 GET INCR OF ONE 0A56 0 C3FF BR TO 13 SD SECTION 80809010 MDX DHOME 0A8D 0 70C8 SAVE INCREMENT 80808330 0A57 0 D302 80809020 SAVE INCREMENT 80808340 0A58 0 D304 STO 3 4 80809030 GET DESIRED DSK ADDR DARMA LD 3 0 0A8E 0 C300 CLEAR A REG 80808350 16 SLA 0A59 0 1010 0A8F 0 D30B STO 3 11 SET IT IN DCT 80809040 3 10 SET ADDR TO ZERO 80808360 STO 0A5A 0 D30A GET PSEUDO PRESENT 80809050 LD 3 -49 0A90 0 C3CF 80808370 CLEAR TRY CNTR STO 3 -23 0A5B 0 D3E9 80809060 SET IT IN DCT 0A91 0 030A STO 3 10 BET INST /X404 80808380 3 34 DHMLE LD OA5C 0 C322 3 -82 BR TO SEEK SUB RT 80809070 0A92 0 43AE BSI SET IT IN DCT 80808390 0A50 0 D306 STO 3.6 80809080 GET RETURN ADDR 80808400 LDX L1 DHMNR 045F 1 6500 0464 BR TO SENSE DSK DSW SC 80809090 BSI 3 -110 0A93 0 4392 STX L1 DCT&29 SET IT IN DCT 80808410 0A60 1 6D00 0BA5 SHIFT TO CK HOME BIT 80809100 0A94 0 1004 SLA 4 80808420 0A62 0 4382 BSI 3 -126 BR TO EXEQ RT 80809110 BSC L DARMZ, Z& BR IF HOME BIT ON 0A95 1 4C28 0A9C BR TO MON START 80808430 BSI 3 -100 0A63 0 439C 80809120 80808440 80809130 BR TO ERR MSAG RT 0A97 0 43B1 DARMC BSI 3 -79 0A64 1 6700 0B88 DHMNR LDX L3 DCT SET BASIC CTRL ADDR 80808450 80809140 BR TO REL CHANNEL SC 80808460 BSI 3 -114 0A66 0 438E 80809150 BR TO MSAG FORM 1 3 46 0A98 0 432E 80808470 0A67.0 C3E9 LD 3 -23 GET CNTR -- MSAG # --80809160 0A99 0 E003 DC /E 003 80808480 ADD ONE 3 -- 1 0A68 0 83FF ERROR LOOP ADDR 80809170 0A9A 1 0A8B DC DCARM SAVE NEW TOTAL 80808490 0A69 0 D3E9 STO 3 -23 80809180 3 -25 TEST FOR MAX 204 CNT 80808500 FOR 0A6A 0 F3E7 80809190 BSI 3 -106 BR TO MONITOR END 0A9B 0 4396 BSC L DARMC, &-BR TO MSAG IF ZERO 80808510 OA6B 1 4C18 OA97 80809200 BSI 3 -110 BR TO SENSE OSW 80808520 0A6D 0 4392 DARMZ BSC I ARM RETURN TO CALLING RT SX 80809210 OA9C 1 4C80 0B08 CHECK FOR HOME BIT 80808530 SLA 0A6E 0 1004 80809220 BSC L DARMZ, Z& 80808540 0A6F 1 4C28 0A9C BR IF HOME BIT ON 80809230 *....^{*} DHMLE BR LOOP 80808550 OA71 O 70EA MUX COMMON EXEQUTE I/O RT * 80809240 80808560 80809250 13 SD RE-ZERO ARM RTN 80808570 80809260 80808580 REQUEST DEVICE 80809270 DEXEQ BSI 3 -118 0A9E 0 438A GET DESIREO AOOR 80808590 ORASK LO 3 11 0A72 0 C30B 80809280 STO 3 -26 80808600 SAVE IT 80809290 0A73 0 03E6 **** ** MAIN LINE MUST RELEASE* 80808610 BR TO DCARM RTN 0A74 0 4380 BSI 3 -128 80809300 80808620 GET NTRPT TIMR ADDR 80809310 LO 3 -71 0A9F 0 C3B9 80808630 BR TO RETURN TO USER BSC L DRSKX 0A75 1 4C00 0A02 SET IN MLSCF TBL 80809320 OAAO 1 D400 0809 STO L LIV 80808640 80809330 80808650 80809340 GET AREA CODE 35 OAA2 0 C305 LD 80808660 SET IN FUNCTION 80809350 **0AA3 0 EB06** OR 3 6 80808670 *···· SET IN MODIFIER 80809360 **0AA4 0 EB07** ΠR 3 7 80808680 SEEK ADJ CYL 089 / 111 * 80809370 PUT XIO IN Q REG SRT 16 OAA5 0 1890 80808690 ************************ 80809380 80808700 80809390 GET ADDR / INCREMENT OAA6 0 C304 LD 3 4 GET DESIREO AOOR 80808710 0477 0 0308 SKADJ LD 80809400 SUB PRESENT AOOR 80808720 S 3 12 80809410 OA 78 O 930C DEXIO SET IOCC WORD 0AA7 0 D804 STD 80808730 SKIP IF POSITIVE BSC 3 0479 0 4808 80809420 SKOUT BR TO NEGATIVE RT 80808740 0A7A 0 7003 MDX OO I/O COMMAND 80809430 DEX IO OAA8 0 0803 XI O 80808750 80809440 80808760 3 -30 GET CYL 111 I D SX 80809450 0A7B 0 C3E2 BSC I EXQ EXIT RETURN OAA9 1 4C80 OBOA 80808770 STO SET AODR 80809460 0A7C 0 030B 3 11 BR TO BR BACK SKOUT&2 80808780 IOCC WORD 80809470 OA7D 0 7002 MOX DEXIO 8SS E 2 OAAC 0002 80808790 80809480 80808800 SKOUT LO 3 -29 GET CYL 089 80809490 0A7E 0 C3E3 *.....^{*} 80808810 SET AODR 80809500 STO 3 11 0A7F 0 D30B ADDR BYPASS CK RT BR TO USER RT 80808820 BSC L OCBPR 80809510 *....* 0A80 1 4C00 0AB6 80808830 80809520 80808840 80809530 GET DESIRED ADDR OCARPIO 3 11OAAE O C30B 80808850 PROG ID 0808-1 010CT67 01NOV67 020EC68 01MAY66 01JUL66 04NOV 66 DATE 28FEB66 PROG IO 0808-1 411875A 411961 PAGE DATE 411875 EC NO. 415120 415120A 415178 415233 PAGE

415120A 415178 415233 411875

FC NO.

415120

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LD

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OCRDY BSI 3 -110

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36

3 33

3 -33

3 -74

3 -126

3 -100

3 29

BSI 3 -114

38

3 -61

3 -52

BSC L RSTRT,Z

3 -17

16

12

I RDY,&-

3 -79

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/E002

OC ROY

RE QDV

CHNBZ

OVA

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3 -26

32

DRASK

S

OAAF O 93EC

OAB2 0 C30B

0A83 0 93ÈA

OAB4 0 4808

OAB5 0 70C1

0AB8 0 .4388

0A88 0 70B6

OABC 0 C308

OABD 0 D3E6

OABE 0 10A0

OABF 0 080A

OACO 0 0304

OAC1 0 C321

OAC2 0 0306

OAC3 0 D30F

OAC4 0 C386

OAC5 0 0310

OAC6 0 4382

OAC7 0 439C

OACA 0 438E

OAC8 0 C308

OACC O E3C3

OACD O F3CC

OA 00 0 1010

0AD1 0 03EF

0AD2 0 C3E6

0AD3 0 030B 0AD4 1 4C80 080E

OAD6 0 4392

0A07 0 180C

OA OA O 4381

0A08 0 432E

OADC 0 E002

OADO 0 0000

OADE 0 70F7

OAE1 1 0A44

OA E2 0 0000

0AE3 1 08D0

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415120

DATE

EC NO.

OA 08 1 4C98 0810

0A 0F 0 4480 0131

01MAY66

415120A

OAC8 1 6700 0888

OACE 1 4C20 0C48

0A80 1 4C28 0A86

0A86 1 4C80 080C

0A89 1 4400 0A82

3 -20

8SC L DCBPR, Z&

3 11

3 -22

3

SKADJ

SUB CYL 90

SU8 CYL 110

FAR RESTORE ARM RT

....

8R IF LESS THAN

GET DESIRED AOOR

BR TO GET CYL &/-

EXIT TO CALL RT

BR TO 13/44 DRTN

GET DESIRED ADDR

CLEAR A & Q

RESET AODR

GET SEEK INST

SET IT IN OCT

SET IT IN DCT

PASS TEST 8ITS

CLEAR A REG

ROY-NOT8USY-OK CK RT

DCDSW RT

EXIT

CHANNEL REQUEST RT

×....×

010CT67

411875

GET OSW

SAVE OESIRED AOOR

SET IT IN MEM FNC

BR TO EXEQ OSK OP

GET NTRPT XFER ADDR

RESET X3 CTRL ADOR

8R TO REL CHAN RT

TEST FOR OK PATTERN

BR HOME 8IT NOT ON

RESET RETRY CNTR

GET DESIREO ADDR

RETURN TO CALLING RT SX

SET ADDR IN DCT

SHIFT FOR BO-83

8R TO ERR MSAG RT

BR TO MSAG FORM 1

NO ERR LOOP AOOR

8R TO PRINT AGAIN

CHANNEL REQUEST RT SEC

-- MSAG # --

BUSY RT ADOR

OEVICE REF AGOR

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OOEF ADOR

8R TO MONITOR START XM

SET OESIRED & PRSNT

BR TO 13 SD SECTION

SKIP IF GREATER THAN

8R TO OISK READY RT SEC

80809540

80809550

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80809680 80809690

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80809950

80809960

80809970

80809980 80809990 80810000

80810010 8081002**0** 80810030

80810040

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80810070

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80810090

80810100

80810110

80810120

80810130 80810140

80810150 80810160

80810170

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80810190

80810200 80810210

PROG IO

PAGE

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SC

SX

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DATE

EC NO.

2315 DISK INITIALIZER

| | OAE4 1 080C | | | DC | | TE RM | ADDR OF/FFFF | | | 8081022 |
|---|---|------|----------------|-----------|-------|-------------------|--|--------------|-------------|--------------------|
| | OAE5 1 6700 | 8880 | | LOX | L3 | OCT | SET X3 CTRL AGEXIT TO CALL S | ODR | | 8081023 |
| | OAE7 1 4C80 | 0812 | | B SC | I | REQ | EXIT TO CALL F | RT | S X | 8081024 |
| | | | * | | | | | | | 8081025 |
| | | | * | | | | | * | | 8081026 |
| | | | * | | | | L I/O AREA RT | * | | 8081027 |
| | | | * | | ••• | FII | L I/O AREA RT | * | | 8081028 |
| | | | * | | | | | | | 8081029 |
| | | | ***** | • • • • • | ••• | • • • • • • • • • | ••••• | ******** | | 808102 |
| | 0.50 0 (500 | 5560 | Φ 0.5.1.1.1 | | | 220 | CET DAGE CTOL | | | |
| | OAE9 0 6500 | | UFILL | LUX | LI | -320 | SET PASS CTRL RESET IOA WITH | | 2₽ | 8081031 |
| | OAEB 1 0500 | | | STO | Ll | OCDA&322 | RESET IOA WITH | H ACC | | 8081032 |
| | OAED 0 7101 | | | MDX | 1 | 1 | OEC CTRL LOOP | | | 8081033 |
| | OAEE O 70FC | | | MOX | | DF ILL&2 | L OOP | | | 8081034 |
| | OAEF 1 4C80 | OB14 | | BSC | I | FLX | L OOP Exit | | SX | 8081035 |
| | | | * | | | | | | | |
| | | | × | | | | NNEL RELEASE RT | | | 8081037 |
| | | | * | | | CHA | NNEL RELEASE RT | * | | 8081038 |
| | | | * | | | | WINEL RELEASE KI | | | 8081039 |
| | | | * | • • • • • | • • • | • • • • • • • • | ••••• | ** | | 909104 |
| | 0.5. 0. //00 | 0122 | CILLEGA | 0.0.1 | | 051.04 | CHANNEL BELEA | יד סיי | CEC | 8081040 |
| | OAF1 0 4480 | | CHNKL | D3 I | 1 | VELDA | CHANNEL RELEAS | oc KI | SEC | 8081041 |
| | 0AF3 0 0000 | | CHNRA | υC | | 0 | DDEF ADOR | | | 8081042 |
| | OAF4 1 080C | | | UC | | IERM | AUUR UF /FFFF | | | 8081043 |
| | OAF5 1 6700 | | | LDX | L3 | DCT | DDEF ADOR AODR OF /FFFF SET X3 CTRL AI | JOR | _ | 808104 |
| | OAF7 1 4C80 | 0816 | | BSC | I | REL | EXIT TO CALL ! | RТ | SX | 8081045 |
| | | | * | | | | | . * | | 8081046 |
| | • | | * | | | | K OELAY ROUTINE | * | | 808104 |
| | | | * | . • | | DIS | K OELAY ROUTINE | * | | 8081048 |
| | | | * | | | ••••• | | | | 8081049 |
| | | | * | | • | | | * | * | 8081050 |
| | 0AF9 0 71FF | | DCD1 V | MDY | , | _1 | DEC NOV -1 | | | 808105 |
| | 0AF4 0 70FE | | DCDLA | MOV | - | *-2 | DEC NOX -1 LOOP IF NOT ZE | -00 | 3 L | 8081052 |
| | 0AFA 0 70FE | | | MOX | 2 | | CET ADD OF DE | TUON | CE | 000105 |
| | OAFB O C3CO | | | LU | د . | -64 | GET AUDR OF RE | ETUKN | SE | |
| | OAFC 1 0400 | | | SIU | L | MLN | GET AODR OF RI SET AODR IN MI BR TO MON STAI SET X3 CTRL AI | _SCF | | 8081054 |
| | OAFE 0 439C | | | 82 I | 3 | -100 | BR TO MON STAI | RT | ΧM | |
| | OAFF 1 6700 | 0B88 | DLABB | LDX | L3 | OC T | SET X3 CTRL AL | 0 0 R | | 808105 |
| | 0801 1 4C80 | 0818 | | BSC | I | DLA | EXIT TO CALL A | ₹T | SX | 808105 |
| | | | * | | | | | * | | 8081058 |
| | | | * | | | | | * * * | | 8081059 |
| | | | * | | | REA | D DSW ROUTINE | * | | 8081060 |
| | | | | | | | | | | 8081061 |
| | | | * | | • • • | | | * | | 8081062 |
| | 0002 0 0000 | | | VIO | 2 | _ 4 0 | DEAD DOW | | | 8081063 |
| | 0B03 0 088C | | OCD3 W | XIU | 2 | -00 | READ DSW SAVE OSW | | 3E | |
| | 0804 0 0308 | | | 2.10 | ٠, | 8 | SAVE USW | | C ++ | 8081064 |
| | 0805 1 4C80 | ORIA | | RZC | 1 | U2M | RETURN TO CALI | _ K I | SX | 808106 |
| | | | * | | • | | | * | | 8081060 |
| | | | * | • • • • • | • • • | • • • • • • • • | - COMMON XFER TAE | • • • • • * | | 808106 |
| | | | * | | | х3 | - COMMON XFER TAL | 3LE ≠ | | 808106 |
| | | | * | | | | | | | 8081069 |
| | | | * | | | | | * | | 808107 |
| | 0808 0000 | | | 8\$5 | Ε | 0 | | | | 808107 |
| | 0808 0 0000 | | ARM | OC | - | ō | | -128 | | 8081072 |
| | 0809 0 7081 | | ~***** | MDX | | DCARM | | 120 | S C | 8081073 |
| | 0009 0 1001 | | * | 1107 | | DOMAIN | | | J U | |
| | 0004 0 0000 | | | 00 | | 0 | | | | 8081074 |
| | 080A 0 0000 | | EXQ | OC. | | 0 | • | -126 | | 8081079 |
| | OB 08 0 7092 | | | MDX | | DEXEQ | | | S C | 8081076 |
| • | | | * | | | | , | | | 808107 |
| | OB OC 0 0000 | | A8P | OC. | | 0 | | -124 | | 8081078 |
| | OBOO O 70AO | | | MDX | | DCABP | | | SC | 8081079 |
| | | | * | | | | | | | 8081086 |
| | | | RSK | OC. | | 0 | | -122 | | 808108 |
| | 080E 0 0000 | | | мох | | DRESK | | | SC . | 8081082 |
| | 080E 0 0000 | | * | | | J., LON | | | | 8081083 |
| | 080E 0 0000 080F 0 70A8 | | -1- | OC. | | 0 | | _120 | | |
| | 080F 0 70A8 | | 004 | 1 11 | | 0 | | -120 | SC | 8081084 |
| | 080F 0 70A8 0810 0 0000 | | ROY | | | | | | \ (| 8081085 |
| | 080F 0 70A8 | | | MDX | | DCRDY | | | 30 | |
| | 080F 0 70A8 0810 0 0000 0811 0 70C4 | | * | MDX. | | | | _ | 30 | 8081086 |
| | 080F 0 70A8 0810 0 0000 | | | | | 0 . | 4.35 | -118 | | 8081086 8081087 |
| | 080F 0 70A8 0810 0 0000 0811 0 70C4 | | * | MDX. | | | | -118 | s c | 8081086 |

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IBM MAINTENANCE DIAGNOSTIC PROGRAM FUR THE 1800 SYSTEM IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM PART ND. 2196374 PART NO. 2196374 2315 DISK INITIALIZER PAGE PAGE 9 A 2315 DISK INITIALIZER 0B14 0 0000 FLX DC 0 -116 OB4F O CEDC 80810900 /CEDC OB15 0 70D3 -57 80811580 MDX DFILL SC 80810910 0850 0 0000 DC /0000 -56 80811590 0851 0 0700 80810920 DC /0700 0B16 0 0000 -55 80811600 REL DC -114 80810930 0B52 0 7000 DC. /7000 -54 0B17 0 70D9 80811610 MDX CHNRL 0B53 0 6400 80810940 DC /6 400 -53 80811620 0854 0 4800 80810950 DC /4800 OB18 0 0000 -52 DLA DC 80811630 0 -112 0855 0 4000 DC 80810960 /4000 OB19 O 70DF -51 80811640 DCDLA MDX SC 0B56 0 0000 80810970 DC /0000 -50 80811650 0B57 0 0657 DC 80810980 /0657 MAX DISK ADDR OB1A 0 0000 -49 80811660 DSW DC -110 0B58 0 1313 DC 80810990 /1313 PATTERN ONE 0B1B 0 70E7 80811670 MDX DCDSW OB 59 0 1000 SC DC 80811000 /1000 NOP INST -47 80811680 OB5A 0 0000 DC 80811010 /0000 **BIT PATTERN** -46 80811690 OB1C 0 0000 HNG DC 0B5B 0 07D0 -108 DC 80811020 /07D0 TIME CONSTANT -45 80811700 OB1D 0 70FF MDX *-1 OB5C 0 0000 DC SC 80811030 0 DISK ADDRESSES -44 80811710 OB5D 0 0000 DC DISK ADDRESSES 80811040 -43 80811720 OB1E 0 0000 MEND DC. 085E 0 0000 DC -106 Ω 80811050 DISK ADDRESSES -42 80811730 0B1F 0 4C80 012E BSC END 0B5F 0 0000 DC 80811060 PXM 0 DISK ADDRESSES -41 80811740 0B60 0 0000 DC DISK ADDRESSES 80811070 0 0821 0 0000 80811750 DC -103 0B61 0 0000 DC 80811080 0 DISK ADDRESSES -39 0B22 1 4C00 0C3B 80811760 BSC L COUNT 0B62 0 0000 SC ' DC DISK ADDRESSES 80811090 0 -38 80811770 0863 0 0000 80811100 DC 0 DISK ADDRESSES -37 0B24 0 0000 80811780 STRT DC O 0B64 0 0000 -100 DC 80811110 DISK WORK AREA -36 80811790 0B25 0 4C80 012D BSC I START 0865 0 0000 80811120 DC ΧM 0 DISK WORK AREA -35 80811800 0B66 0 0000 DC. 80811130 0 DISK WORK AREA 0B27 0 0000 -34 80811810 RTN D.C. OB 67 0 0000 -97 80811140 DC 0 DISK WORK AREA -33 80811820 0B28 1 4C00 08A7 BSC L DCRTN 0B68 0 0000 DC 80811150 0 DISK WORK AREA -32 80811830 0B 69 0 0000 80811160 DC 0 DLA XTNT HLDR -31 80811840 OB2A 0 0000 REST DC 0B6A 0 0378 /0378 80811170 DC -30 80811850 OB 2B 1 4COO 0859 BSC L DCTRL 0B6B 0 02CF SC 80811180 DC /02CF -29 80811860 OB6C 0 0000 80811190 DC O 0B2D 0 0000 -28 80811870 DEND . DC **-91** 0B6D 0 0141 80811200 DC. 321 -27 80811880 0B2E 1 4C00 08BC BSC L DCEDD 086E 0 0000 80811210 DC 0 -26 80811890 0B6F 0 00CC 80811220 DC 204 -25 80811900 0B30 0 0000 DRD DC. 0B70 0 00C8 -88 DC 80811230 200 -24 80811910 0B31 1 4C00 0936 BSC L DCRD 0871 0 0000 SC 80811240 DC 0 -23 80811920 0B72 0 0377 DC /0377 80811250 -22 0B33 0 0000 80811930 DWR DC QB73 0 0000 DC 80811260 0 -21 80811940 OB34 1 4C00 091A BSC L DCWR 0874 0 02D0 SC DC. 80811270 /02D0 -20 80811950 0875 0 0018 DC 80811280 24 -19 80811960 0B36 0 0000 DSK DC. 0876 0 0000 -82 DC 0 80811290 -18 80811970 0B37 1 4C00 09EE BSC L DCSK 0877 0 0000 SC DC 0 80811300 -17 80811980 0878 0 0010 DC 16 80811310 80811990 0B39 0 0000 EMF D.C. 0 0879 0 000F DC -79 15 80811320 -15 80812000 **OB3A 1 4C00 OA4A** BSC L EMNRT 0B7A 0 000E DC 14 80811330 -14 80812010 OB 7B 0 000D DC 80811340 13 -13 80812020 ו••••••• 0B7C 0 000C DC 80811350 -12 80812030 X3 - CDMMDN XTNT REF TBL * OB 7D O OOOB DC 11 80811360 -11 80812040 087E 0 000A DC 10 80811370 -1080812050 087F 0 0009 DC B0811380 80812060 0B3C 1 0859 DCTRL 0B80 0 0008 DC 80811390 80812070 0B3D 1 085F -75 DCTL2 0881 0 0007 DC 80811400 -7 80812080 **OB3E 1 OAC8** DC DRSKR 0B82 0 0006 -74 80811410 80812090 0B3F 1 09B1 DC CDTNR 0B83 0 0005 -73 80811420 D.C. 80812100 0B40 1 0A06 DĊ DSKNR -72 0B84 0 0004 DC 80811430 80812110 0B41 1 08C1 DC DLNRT -71 0B85 0 0003 80811440 DC 80812120 0B42 0 0000 DC /0000 -70 80811450 0B86 0 0002 80812130 0B43 0 0701 DC /0701 0B87 0 0001 -69 80811460 80812140 0B44 0 0000 /0000 -68 80811470 80812150 0B45 0 0700 DC /0700 -67 80811480 80812160 0B46 0 0658 /0658 X3 - DISK CTRL TABLE * 80811490 80812170 0B47 0 8000 DC /8000 -65 *....* 80811500 80812180 0848 1 0AFF DC DLABB -64 80811510 80812190 0B49 0 0100 DC 0B88 0 0000 DCT DC /0000 /0100 -63 ZERO CONSTANT 80811520 80812200 OB4A O FFFF DC /FFFF OB89 1 OC55 DC DCDA READ DATA AREA FLD 1 -62 80811530 80812210 OR4B O FFF8 /FFF8 088A 0 0000 DC 0 -61 80811540 SEEK INCR CALC HLD 2 80812220 OB4C O FOFF DC. 0888 0 0000 /FOFF -60 DC SK - WR - RD SWCTL 3 80812230 80811550 0B4D 0 F7F8 DC 088C 0 0000 /F7F8 DC 0 I/D AREA / CYL INC 4 -59 80811560 80812240 0B4E 0 E5E5 /E5E5 PATTERN ZERD 0B8D 0 0000 -58 80811570 DC 0 AREA CDDE 80812250 DATE 28FEB66 01MAY66 01JUL66 04NOV66 010CT67 DATE 28F**E**B66 01MAY66 01NDV67 02DEC6B **01**JUL66 04NOV66 PROG ID 01DCT67 01NDV67 0808-1 02DEC68 PRDG ID 0808-1 EC ND. 415120

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| OB8E 0 0000 | DC | 0 | FUNCTION 6 | 80812260 | |
|----------------------------|-----------------|-----------------------|--|----------------------|--------|
| OB8F 0 0000 | OC | 0 | MOOIFIER 7 | 80812270 | |
| 0B90 0 0000 | DC | 0 | LAST DSW READ 8 | 80812280 | |
| 0B91 0 0000 | DC | 0 | LAST GOOD CYL READ 9 | 80812290 | |
| 0892 0 0000 | DC | 0 | PRESENT CYL 10 | 80812300 | |
| 0893 0 0000 | OC | 0 | DESIRED CYL HDOR 11 | 80812310 | |
| 0B94 0 0000 | OC | 0. | ACTUAL ADOR READ 12 | 80812320 | |
| 0B95 0 0000 | OC. | . 0 | CURRENT WORD CNT 13 | 80812330 | |
| OB 96 O 0000 | DC | 0 | RD-WR ERR TRY CTR 14 | 80812340 | |
| 0B97 0 0000 | DC | 0 | SEEK ERR TRY CTR 15 | 80812350 | |
| 0B98 0 0000 | DC | 0 | TOTAL SEEKS 16 | 80812360 | |
| 0B99 0 0000 0B9A 0 0000 | DC | 0 | TOTAL WRITES 17 | 80812370 | |
| 0B9B 0 0000 | D C DC | 0 | TOTAL READS 18 | 80812380 | |
| 0B9C 0 0000 | DC | 0 0 | TOTAL SEEK ERRORS 19 | 80812390 | |
| 0B9D 0 0000 | DC | 0 | TOT SFT WR ERRORS 20 TOT HRD WR ERRORS 21 | 80812400 80812410 | |
| OB9E 0 0000 | DC | ŏ | TOT SFT RD ERRORS 22 | 80812410 | |
| 0B9F 0 0000 | oc oc | o | TOT HRD RD ERRORS 23 | 80812430 | |
| OB AO O 0000 | DC | ŏ | TOT PROG PASSES 24 | 80812440 | |
| OBA1 0 0000 | OC | Ō | ROUTINE EXEQ NUM 25 | 80812450 | |
| OB A2 0 0000 | DC | ō | RO-ROCK MODE CODE 26 | 80812460 | |
| OBA3 0 0000 | OC | Ö | LOST TIME DLA CTR 27 | 80812470 | |
| OBA4 O OFFF | DC | /OFFF | LOST TIME OLA XNT 28 | 80812480 | |
| OBA5 0 0000 | OC | 0 | NTRUPT RTRN ADDR 29 | 80812490 | |
| OB A6 O OOOO | o c | 0 | WD NUM OF PAT ERR 30 | 80812500 | |
| OBA 7 0 0000 | OC | 0 | OESIRED PATTERN 31 | 80812510 | - |
| OB A8 O 00 OO | _ DC | 0 | ACTUAL PATTERN 32 | 80812520 | |
| OBA9 0 0400 | OC | /0400 | DIRECT ACCESS SK 33 | 80812530 | |
| OB AA O 0404 | DC | /0404 | SEEK OUT 34 | 80812540 | |
| OBAB 0 0500 | oc | /0500 | DISK WRITE DATA 35 | 80812550 | |
| OBAC 0 0600 | DC | /0600 | DISK READ DATA 36 | 80812560 | |
| OBAD 0 0608 | DC | /0608 | DISK READ CHECK 37 | 80812570 | |
| OBAE 0 0700 OBAF 0 0701 | OC DC | /0700 | OISK SENSE NORSET 38 | 80812580 | |
| ODAT O OTOI | * | /0701 | OISK SENSE RESET 39 | 80812590 | |
| | * | | * | 80812600 80812610 | |
| | * | Х3 | - MSAG REF TBL * | 80812620 | |
| | * | • • • • • • • • • • | ****** | 80812630 | |
| | * | | * | 8081264 0 | |
| | * | | 辛 | 80812650 | |
| | * | • • • • • • • • • • | · · · · · · · · · · · · · · · · · · · | 80812660 | |
| | * | MSA | G FORMAT ROUTINE # | 80812670 | |
| | * | • • • • • • • • • • • | • | 80812680 | |
| | * | | * | 80812690 | |
| | * . | | | 80812700 | |
| OBB O O 0000 | FORMO DC | 0 | SAVE ENTRY ADOR SE | 80812710 | |
| 0BB1 1 6580 0BB0 | LDX | II FORMO | SAVE ADDR FOR RTRN | 80812720 | |
| 0BB3 0 C300 | LD | 3 0 | GET WORD COUNT | 80812730 | |
| 0BB4 0 D07C 0BB5 D 704D | STO | DCOUT | PUT IT IN MSAG OPA | 80812740 | |
| 0865 0 7040 | MDX ≄ | OCOSW | BRNCH TO OUTPUT CALL | 80812750 | |
| OBB6 0 0000 | FORM1 DC | 0 | SAVE ENTRY ADDR SE | 80812760 | |
| OBB7 1 6580 OBB6 | LDX | Il FORM1 | SAVE ENTRY AGON SE | 80812770 80812780 | |
| OBB9 0 C3FF | LD | . 3 -1 | GET WORD COUNT | 80812790 | |
| OBBA 0 0076 | STO | OCOUT | PUT IT IN MSAG OPA | 80812800 | |
| OBBB 0 700D | MOX | OCFMB | BR TO FINISH SETUP | 80812810 | |
| | * | | | 80812820 | |
| OBBC 0 0000 | FORM2 DC | 0 | SAVE ENTRY ADDR SE | 80812830 | |
| OBBD 1 6580 OBBC | LOX | Il FORM2 | SAVE AODR FOR RTRN | 80812840 | • |
| OBBF O C3FB | LD | 3 -5 | GET WORD COUNT | 80812850 | |
| OBCO O DO70 | STO | DCOUT | PUT IT IN MSAG OPA | 80812860 | • |
| OBC1 0 C302 | LD | 3 2 | GET TRACK SEEK CNT | 80812870 | |
| OBC2 O DO75 | STO | DCOUT&7 | SET CNT IN MODIFIER | 80812880 | |
| OBC 3 O C 30C | DCFMA LO | 3 12 | FOUND CYL & SECT | 80812890 | |
| OBC4 O DO72 | STO | DCOUT&6 | SET CYL IN MODIFIER | 80812900 | _ |
| 0BC5 0 C30B | LO ^x | 3 11 | DESTRED CYL & SECT | 80812910 | - |
| 0BC6 0 D06F | STO | OCOUT&5 | SET CYL IN MODIFIER | 80812920 | |
| 0BC7 0 C309 | ĻD | 3 9 | LAST CYL AND SECT | 8081293 0 | |
| · | | | | | |
| | | | , | | |
| 28FEB66 01MAY66 | 01JUL66 | 04NOV66 DI | OCT67 01NOV67 02DEC68 | PROG ID | 0808-1 |
| 415120 415120A | | | 1875 411875A 411961 | PAGE | 10 |

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| | 0BC8 0 006C | | | STO | DCOUT&4 | SET CYL IN MODIFIER | | 80812940 |
|-----|------------------------------|-------|----------|------------|-------------------------------|--|----|------------------------------|
| | OBC9 0 C308 | | DCFMB | | 3 8 | LAST DSW | | 80812950 |
| | OBCA 0 D069 | | | STO | 0C0UT&3 | SET OSW IN MODIFIER | | 80812960 |
| | OBCB 0 7037 | | | MDX | OCOSW | BRNCH TO OUTPUT CALL | | 80812970 |
| | | • | * | | • | | | 80812980 |
| | OBCC 0.0000 | | FORM 3 | OC | 0 | SAVE ENTRY ADDR | SE | 80812990 |
| ٠. | OBCD 1 6580 (| овсс | | LOX | II FORM3 | SAVE AOOR FOR RTRN | | 80813000 |
| | OBCF 0 C3F9 | | | LO | 3 -7 | GET WORD COUNT | | 80813010 |
| | 08 DO 0 DO 60 | | | STO | OCOUT | PUT IT IN MSAG OPA | | 80813020 |
| | OBD1 0 C31E | | | FD | 3 30 | WC OF ERROR DATA | | 80813030 |
| | 0B02 0 D065 0BD3 0 C31F | | | STO | OCOUT&7 | SET WEC IN MODIFIER | | 80813040 |
| | 0BD4 0 D064 | • | | LO STO | 3 31 | EXPECTED WORD | | 80813050 |
| | 0805 0 C320 | | | 510 LO | OCOUT&8 3 32 | SET EXP IN MODIFIER ACTUAL WORD | | 80813060 80813070 |
| | 0BD6 0 D063 | | | STO | 0C0UT&9 | SET ACT IN MODIFIER | | 80813070 |
| | OBD7 0 70EB | | | MOX | OCEMA | BR TO FINISH SETUP | | 80813090 |
| | | | * | | OUTTA | DR 10 1 INISH SETOP | | 80813100 |
| | OBO8 O OOOO | • | FORM4 | oc | 0 | SAVE ENTRY ADOR | SE | 80813110 |
| | OBD9 1 6580 (| 08 08 | | FOX | Il FORM4 | SAVE ADOR FOR RTRN | JL | 80813120 |
| | OBOB O C3FD | | | LD | 3 -3 | GET WORD COUNT | | 80813130 |
| | OB DC 0 D0 54 | | | STO | OCOUT | PUT IT IN MSAG OPA | | 80813140 |
| | OBOD O C3CB | | | LO | 3 -53 | GET BR INST | | 80813150 |
| | OBDE 0 D049 | | | STO | DCELS | PUT IN NOP / BR INST | | 80B13160 |
| | OBDF 0 C318 | • | | LD | 3 24 | PROG. EXECUTITIONS | | 80813170 |
| | OB EO O DO 53 | | | STO | OCOUT&3 | MOOIFIER NO. 1 | | 80813180 |
| | OBE1 0 C310 | | | LO | 3 16 | TOTAL SEEKS | | 80813190 |
| | OB E2 O DO 52 | | | STO | OCOUT&4 | MODIFIER NO. 2 | | 80813200 |
| • | OBE3 0 C313 | | • • | LD | 3 19 | SEEK ERRORS | | 80813210 |
| | OBE4 0 DO51 OBE5 1 6600 (| 00.50 | | STO | OCOUT&5 | MOOIFIER NO. 3 | | 80813220 |
| | OBE7 0 6A41 | ODEA | | LOX STX | L2 FRM4A 2 OCELS&1 | GET ALTERNATE RETURN | | B0813230 |
| | OBE8 0 701A | | | MOX | OCOSW | PUT IN ADORESS BRNCH TO OUTPUT CALL | | 80813240 |
| | OB E9 O CO 47 | | FRM4A | | OCOUT | LINE NO. & WORD CT. | | 80813250 808 13260 |
| | OBEA 0 83C1 | | 1 100 16 | A | 3 -63 | INCREMENT LINE NO. | | 80813270 |
| | 0BEB 0 D045 | | | STO | DCOUT | THOREMENT ETHE NOT | | 80813280 |
| | OBEC 0 C311 | | | £0 | 3 17 | TOTAL WRITES | | 80813290 |
| | OBEO 0 DO46 | ā. | | STO | , DCOUT&3 | MODIFIER NO. 1 | | 80813300 |
| | OBEE 0 C314 | | | ΓD | 3 20 | SOFT WRITE ERRORS | | 80813310 |
| | OBEF 0 0045 | | | STO | 0 C 0UT&4 | MOOIFIER NO. 2 | | 80813320 |
| | OBFO 0 C315 | | | LO | 3 21 | HARO WRITE ERKORS | | 80813330 |
| | 0BF1 0 D044 | | | STO | OCOUT&5 | MOOIFIER NO. 3 | | 80813340 |
| | OBF2 1 6600 (| OBF6 | | LDX | L2 FRM4B | GET ALTERNATE RETURN | | 80813350 |
| | OBF4 0 6A34 | | | STX | 2 OCELS&1 | PUT IN ADORESS | | 80813360 |
| | OBF5 0 7021 OBF6 0 CO3A | | CDMAD | MOX | OCLGX | BRNCH TO OUTPUT CALL | | 80813370 |
| | 0BF7 0 83C1 | | FRM4B | Α LU | 0C OUT 3 -63 | LINE NO. & WORD CT. INCREMENT LINE NO. | | 80813380 |
| | 0BF8 0 D038 | | | ŜTO | | INCKLINENT LINE NO. | | 80813390 80813400 |
| - | OBF9 0 C312 | | | F0 | 3 18 | TOTAL READS | | 80813410 |
| • | OB FA 0 DO 39 | | | STO | DCOUT&3 | MODIFIER NO. 1 | | 80813420 |
| | OBFB 0 C316 | | | LO | 3 22 | SOFT READ ERRORS | | 80813430 |
| | OB FC 0 DO38 | | | STO | OC 0UT&4 | MOOIFIER NO. 2 | | 80813440 |
| | OBFD 0 C317 | | | LO | 3 23 | HARO READ ERRORS | | 80813450 |
| _ | OBFE 0 DO37 | | | STO | OCOUT&5 | MODIFIER NO. 3 | _ | 80813460 |
| | OBFF 0 C3D1 | | | LD | 3 -47 | GET NOP INST | - | 80813470 |
| | 0C00 0 D027 | | | STO | DCELS | RESET TO NOP | | 80813480 |
| | OCO1 0 DO27 | | | STO | OCELS&1 | RESET TO NOP | | 80813490 |
| | OC 02 0 7014 | | * | MDX | OCLGX | BRNCH TO OUTPUT CALL | | 80813500 |
| | | | | | | *********** | | 80813510 |
| | | | * | • • • • • | • • • • • • • • • • • • • • • | ************************************** | | 80813520 |
| | | | * | | SET | UP OUTPUT AREA # | | 80813530 80813540 |
| | | | * | | | * | | 80813550 |
| | | | ÷ | | ****** | •••••• | | 80813560 |
| | 0C03 0 C100 | | DC OS W | FO. | 10 | GET MASG CODE # | | 80B13570 |
| | OC 04 0 D0 2E | | | STO | DCOUT&2 | PUT MSAG # IN TBL SHIFT FOR LOG CK | | 80813580 |
| ^ • | 0C05 D 180C | | | SRA | 12 | SHIFT FOR LOG CK | | 80813590 |
| | 0C06 0 F3F2 | | | EOR | 3 -14 . | TEST FOR ERR INO | | 80813600 |
| | 0007 1 4020 0 |)C16 | | BSC | L DCLGC,Z | BR TO LOG CALL RT | | 80813610 |
| | | | | | | | | |
| | | | • | | | | | |
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OC 09 0 7101 MDX 1 1 ADD TO ADDR CTRL 80813620 OCOA O C100 LD 10 GET ERROR ADDR 80813630 OC 08 D DOD5 STO DC ERC&4 PUT IT IN CALL RT 80813640 OCOC 0 6923 STX 1 DCELX SAVE X1 80813650 ***** ****** 8081366D OCOD 0 4480 0130 DCERC 8SI I ERROR MONITOR ERROR RT * SC 8081367D DCDF 1 DC31 DC DCOUT OUTPUT ADDR 8081368D OC10 1 OC13 OC. 0C8SY 8USY ROUTINE ERR * 8081369D OC11 0 D000 DC 0 ERROR LOOP 808137DD ******** 8081371D DC 12 0 700A MDX DCEC 8D813720 80813730 OC13 1 6600 OCOD DC8SY LDX L2 OCERC GET BUSY RETURN ERR 8D81374D OC15 D 70DC MDX OC8 ZR 8R TO SETUP RETURN 80813750 80813760 DC16 0 6919 OCLGC STX 1 DCELX SAVE X1 8081377D ***** 8D813780 OC17 0 4480 012F DCLGX 8SI I LOG MONITOR LOG ROUT * SC 8081379D DC 19 1 DC 31 DC DCOUT OUTPUT ADDR 8081380D OC1A 1 OC20 DC DC8 ZY 8USY ROUTINE LOG * 80813810 OC 18 1 DC 26 O.C. OCLR HOLD DURING DUTPUT * 8081382D ******** 80813830 OC1C 0 70D7 MDX DC8ZR&2 8R TO START EXIT 8081384D OC1D 1 6600 OC26 DCEC LOX L2 DCLR 8081385D OC1F D 7D02 MOX DC 8ZR 8081386D 8D813870 OC 2D 1 660D DC17 DC8ZY LDX L2 DCLGX GET BUSY RETURN LOG 8081388D OC22 1 6E00 0808 DC8ZR STX L2 MLN **8USY RETURN SETUP** 8D81389D 8D8139DD 8081391D 0C24 D 4C8D 012D 8SC I START ENTER MONITOR * XM 80813920 ******** 80813930 80813940 DC26 1 6700 D888 DCLR LOX L3 OCT RESET X3 TO DCT ADDR SE 8D81395D DC 28 0 1000 DCELS SLA 0 NOP / 8R INST 80813960 0C29 0 100D SLA 0 NOP / 8R ADOR WORD 80813970 OC 2A 1 6580 OC 3D LDX II DCELX GET SAVED X1 8081398D DC2C 0 1010 SLA 16 CLEAR ACC 80813990 OC 2D 0 00D3 STO DCOUT CLEAR TW OPA FST WD 80814DDD OC2E 0 4D00 0001 OCRMB 8SC L1 1 RETURN TO ENTRY RT SX 8081401D 80814020 0C30 D 0000 DCELX OC X1 SAVE AREA 8081403D 8081404D 80814050 OUTPUT AREA 80814D6D 80814D7D 8081408D 0C31 D 0000 DC OUT DC 80 HOLD 1-7 LINE WC 8D814D90 OC 32 O ODOD 00 0 80 DEC IND 8D8141DD DC33 D 0000 DC MESSAGE ID 8081411D OC 34 0 0000 DC. MODIFIER NO. 1 8D81412D OC35 0 0000 OC 8D81413D OC 36 0 0000 DC 8081414D 0037 0 0000 DC 8D81415D OC 38 0 000D OC 8D81416D 0C39 0 0D00 OC 8D81417D OC 3A 0 0000 DC 0 8D81418D *••••••••••••• 8D81419D 808142D0 ACCESS INOP RETRY RTNS 8081421D 80'81422D

| | | • | | | | | |
|--------|------------------|------|-----------|----------------|-------------------------|---|------------------|
| | | | | | • | | |
| | 0 03EE | | | STO | 3 -18 | RESET COUNTER | 80814 |
| | 1 D400 | | CNTNE | OTR C | L LIV | CLEAR | 80814 |
| | 1 DCDD | A080 | | STD | L XNR | MLSCF | 80814 |
| 0647 | 0 4390 | | | 8\$ I | 3 -100 | 8R TO MON - NO ENTRY P | 80814 |
| | | | * * | | | * | 80814 |
| | | | * | | MESSAGE | & RETRY ROUTINE * | 80814 |
| 0048 | 0 4381 | | RSTRT | 128 | 3 -79 | SET ENC IN MOAC | 80814 |
| | 0 432E | | KJIKI | 8S I | 3 46 | | C 80814 |
| | O EDDA | • | | DC | /E00A | 8R TU MSAG FORM 1 MC | 80814 80814 |
| OC 48 | D DDOD | | | DC | D | NO ERROR LOOP ADOR | 80814 |
| | | | * | | | | 80814 |
| | O C3EF | | | LD | 3 -17 | GET COUNT | 80814 |
| | 0 83FF | | | Α | 3 -1 | ADO ONE | . 80814 |
| | D D3EF O F3FD | | | STO | 3 -17 | SAVE NEW TOTAL | 80814 |
| | 1 4020 | 0461 | • | EUR | 3 -16 | TEST FOR 16 | 80814 |
| | 0 1DAO | OACI | | 8 S C S L T | L DRERT,Z | 8R IF NOT MAX | 80814 |
| | 0 D3EF | | • | STO | 32 3 -17 | CLR A & Q REG RESET COUNTER | 80814 |
| 0C54 | D 70EE | | | MDX | CNTNO | 8R TO ENO PGM | 80814 |
| | | • | * | | 3.11.110 | * | 80814 |
| | | | * | | ••••• | * | 80814 80814 |
| | | | * | | OISK | IDCC AND CE HIST * | 80814 |
| | | | *•••• | | • • • • • • • • • • • • | * | 80814 |
| 0055 | | | * | | | * | 80814 |
| | O DDOD | • • | DCDA | DC | D | TWORD COUNT | 80814 |
| | O DDDD | | | DC | 0 | OATA FIRST WORD | 80814 |
| DC57 | 0140 | | | 888 | 320 | REMAINING AREA | 80814 |
| 0.00.7 | O FFFF | | * , | 0.0 | | | 80814 |
| | 0 FFFF | | OCE | DC | /FFFF | DISK HISTORY DATA | 80814 |
| | 0 FFFF | | | DC DC | /FFFF /EEEE | DISK HISTORY DATA | 808146 |
| | D FFFF | | | DC | /FFFF /EEEE | DISK HISTORY DATA | 808146 |
| | D FFFF | | | DC | /FFFF /FFFF | OISK HISTORY DATA | 808146 |
| | D FFFF | | | DC | /FFFF | OISK HISTORY DATA OISK HISTORY DATA | 808146 |
| | D FFFF | | | DC | /FFFF | OISK HISTORY DATA | 808146 |
| | O FFFF | | | DC | /FFFF | OISK HISTORY DATA | 808146 808146 |
| 0 D9 F | O FFFF | | | DC | /FFFF | DISK HISTORY DATA | 808146 |
| | O FFFF | | | DC | /FFFF | DISK HISTORY DATA | 808146 |
| | 0 FFFF | | | DC | /FFFF | DISK HISTORY DATA | 808146 |
| | D FFFF | | | DC | /FFFF | DISK HISTORY DATA | 808147 |
| | 0 FFFF | | | DC | /FFFF | DISK HISTORY DATA | 808147 |
| | D FFFF | | | DC | /FFFF | DISK HISTORY DATA | 808147 |
| | O FFFF | | | DC | /FFFF | DISK HISTORY DATA | 808147 |
| | D FFFF O FFFF | | | 0C | /F FFF | DISK HISTORY DATA | 808147 |
| | D FFFF | | | DC | /FF F F | DISK HISTORY DATA | 808147 |
| | D FFFF | | | DC | /FFFF | DISK HISTORY DATA | 808147 |
| | O FFFF | | | DC DC | /FFFF /FFFF | DISK HISTORY DATA | 808147 |
| | O FFFF | | | DC | /FFFF | DISK HISTORY OATA | 808147 |
| | O FFFF | | | DC | /FFFF | DISK HISTORY DATA | 808147 |
| | D FFFF | | | DC | /FFFF . | DISK HISTORY DATA DISK HISTORY DATA | 808148 |
| | D FFFF | | | DC | /FFFF | DISK HISTORY DATA | 808148 |
| | O FFFF | | | DC | /FFFF | DISK HISTORY DATA | 808148 |
| | FFFF | ** | | DC | /FFFF | DISK HISTORY DATA | 808148 |
| | 0 FFFF | | | DC | /FFFF | DISK HISTORY DATA | 808148 808148 |
| | FFFF | | | DC | /FFFF | DISK HISTORY DATA | 808148 |
| | | | * | - | | JION HISTORY DATA | 808148 |
| | | | *##### | ##### | ########### | ################# | 808148 |
| | | | * * * * * | | | **** | 808148 |
| | | | * | | | * | 808149 |
| | | | * | | ** STAR | T INITIALIZATION ** * | 808149 |
| | | | * | | | * | 808149 |
| | | | | | | **** | 808149 |
| | | | | ##### | ########## | <i></i> #################################### | 808149 |
| | | | * | | | | 808149 |
| | | | *••••• | • • • • • | • • • • • • • • • • • | · · · · · · · · · · · · · · · · · · · | 808149 |
| | | | | | | * | 808149 |

DATE

OC 38 O C 3EE

DC3C 0 83FF

OC 3D 0 D3EE

0C3E D F3E8

DC41 0 10A0

OC 3F 1 4C 2O OAOE

COUNT LD

Α

STO

E OR

SLT

3 -18

3 -1

3 -18

3 -24

32

8SC L DSKCR,Z

GET COUNT

SAVE NEW TOTAL

8R IF NOT MAX

CLR A & Q REG

AOD ONE

• • • • • • • • • • • • • • • • • • *

TEST FOR 200 RETRIES

8D814230

8081424D

8081425D

8D814260

8081427D

8081428D

8D814290

D1JUL66 415178

04NOV66 415233

010CT67 411875

D1N0V67 02DEC68 411875A 411961

PROG ID PAGE

D808-1 114

0808-1

12A

2315 DISK INITIALIZER

EC NO.

| 1 | | | | | | |
|-----------|--------|--------------------------------------|---|--|----------------|------------------|
| | | | * | GET WORD COUNT SET WORD COUNT CLR ACC X CLR CTR C CLR CTR DESIRED CYLINDER AND SECTOR SET TO 000 SELECTION OF NEXT SECTOR* BR TO CK BYPASS CYL SEEK NEXT SECTOR T BR TO SETUP PATTERN WRITE SECTOR ID E ERROR RETURN ADDRESS IF ID IS OK, GEN NEW # | | |
| £ | | | * | BEGIN KI FOI WR ADDR-PAT | * 80: | 814980 |
| • | | 0003 0 0355 | *······ | | * 80 * 80 | 814990 |
| 300 | | 0083 0 0365 | F01AA LD 3 -27 | GET WORD COUNT | F 80 | 815000 815010 |
| E. | | 0DB5 0 C300 | \$10 3 13 | SET WORD COUNT | 808 | 815020 |
| | | ODB6 1 D400 OEA4 | SIO I CVIE | CLR ACC | 80 | 815030 |
| 4 | | ODB 8 1 D400 ODD9 | STO L CYLE | C CLR CIR | 808 | 815040 |
| *** | | ODBA O C300 | LD 3 0 | DESTRED CYLINDER AND | 808 | 815050 |
| 500 | | 0088 0 0308 | STO 3 11 | SECTOR SET TO 000 | 808 | 315060 815070 |
| · 56. | | | * | • | * 808 | 315080 |
| | | | * | SELECTION OF NEXT SECTION | * 808 | 315090 |
| Crystal . | | | * | TOTAL OF MEXT SECTOR | ° 808 | 315100 |
| | | ODBC 0 4384 | EOLAD DET | ******************* | 808 | 15110 115120 |
| * | | ODBD O 43AE | F015K R51 3 -124 | BR TO CK BYPASS CYL | SC 808 | 315130 |
| | | ODBE 1 4C00 0EA5 | BSC L PATR | T BR TO SETUR DATES | SC 808 | 15140 |
| • | | ODCO 0 43A8 | F01WR BSI 3 -85 | WRITE SECTOR IN | 808 | 15150 |
| ×. | | ODCI O 700E | MDX FOLAI | E ERROR RETURN ADDRESS | 808 | 15170 |
| | | | * | · · · · · · · · · · · · · · · · · · · | 808 | 15180 |
| Serve . | | | * | # IF ID IS ON OCH NOW | 808 | 15190 |
| (| | | * | SECTOR ADDRESS AND ** | 808 | 15200 |
| 5 | | | * | IF ID IS OK, GEN NEW # SECTOR ADDRESS AND # CONTINUE TEST # 8R TO RD RT RD ERR RETURN | . 808 808 | 15210 |
| ie. | | ODC2 0 43A8 | FAIRD RST 2 00 | · · · · · · · · · · · · · · · · · · · | 808 | 15230 |
| | | ODC 3 0 7010 | MDX F01AF | 8R TO RD RT | SC 808 | 15240 |
| | | 0.000 / 1. 7/44 | * | RD ERR RETURN 11,1 INCREMENT SECTDR ADR GET DISK MAX CTRL TEST CURRENT ADDR BR DUT IF ZERO CDNTINUE TEST GET NOP INST SET BR/NOP SW TO NOP SET BR/NOP SW TO NOP BR TD DCRTN | 808 | 15250 |
| | | 0DC4 1 7401 0B93 | FOIAC MDX L DCT&1 | 11.1 INCREMENT SECTOR ADR | 808. | 15260 |
| 6 | | ODC 7 O F30B | LD 3 -66 | GET DISK MAX CTRL | 8081 | 15280 |
| €. | | ODC8 0 4820 | BSC 7 | TEST CURRENT ADDR | 8081 | 15290 |
| _ | | ODC9 0 70F2 | MDX FOLAB | CONTINUE TEST | 8081 | 15300 |
| | | 00C V 0 C3D1 | * | 100 1031 | 8081 8091 | 15310 |
| | | ODCB 1 D400 0914 | LD 3 -47 | GET NOP INST | 8081 | .5320 15330 |
| (| | ODCD 1 D400 0936 | STO E COWK | SET BRINOP SW TO NOP | 8081 | 5340 |
| ž | | 0005 0 1005 | * | SEL BRANDS 2M ID MDB | 8081 | 15350 |
| ~ | | UUCF 0 439F | BSI 3 -97 | BR TD DCRTN | SC 8081 | .5360 |
| (| | | ************************************** | • | 8081 | .5380 |
| | | | * | # # P ANALYSISS C LOCOTUS | 8081 | .5390 |
| | | | * | ENN ANALISISS & LUGGING * | 8081 | 5400 |
| ₹. | | 0DD0 0 4334 | ~ · · · · · · · · · · · · · · · · · · · | BR TD DCRTN ** ERR ANALYSISS & LOGGING * BR TD MSAG FORM 2 MSAG # ERROR LOOP RE-WRITE | 8081 | 5410 |
| | | 0DD1 0 E060 | FOIAE BSI 3 52 | BR TD MSAG FORM 2 | MC 8081 | 5430 |
| 6 | | 0DD2 1 0DC0 | DC FOLWR | MSAG # | 8081 | 5440 |
| _ | | 0DD3 0 70EE | MDX FOIRD | ERROR LOOP RE-WRITE BR TO RD CK | 0001 | J 1 J U |
| | | 0DD4 0 4334 | * | SK 10 KD CK | 8081: 8081: | |
| | | 0DD5 0 E061 | F01AF BSI 3 52 | BR TO MSAG FORM 2 | MC 8081 | - |
| | | ODD6 1 ODC2 | DC /E061 DC F01RD | MSAG # | 8081 | |
| 800 | | 0DD7 0 4002 | BSI CETRT | ERR LOOP ADDR BR TD CYL ERR TBL RT | 80819 | |
| gar. | | ODD8 0 70EB | MDX FO1AC | BR TO CONTINUE | | |
| | * | | *••••••••••••••• | ******** | 80815 80815 | |
| | | | | * * * * * * * * * * * * * * * * * * * | 80815 | |
| | | | * | RROR CONTROL ROUTINE # | 80815 | |
| No. | | 0DD9 0 0000 | *······ | *************************************** | 80815 | |
| gra. | | 00000 | CYLEC DC 0 | CYL ERR CTR | 80815 80815 | |
| ₹. | | ODDA 0 0000 | CETRT DC 0 | CANE CHES | 80815 | |
| | | ODDB O COFD | LD CYLEC | SAVE ENTRY TEST | 80815 | 600 |
| t. | | 0DDC 0 F3FD | EOR 3 -3 | FOR | SE 80815 | |
| 1000 | | ODDD 1 4C18 ODF9 ODDF 1 74O1 ODD9 | BSC L DSKNG. | E- MAX ERR TEST - | 80815 80815 | |
| - | • | 1101 0009 | MDX L CYLEC, | 1 CNT | 80815 | |
| * Maker | | | - | | 80815 | |
| er. | | | | | | |
| ٠ | DATE | 28FEB66 01MAY66 | 01 80 77 200 | | | |
| | EC NO. | 415120 415120A | 01JUL66 04NDV66 415178 415233 | 010CT67 01NOV67 02DEC6 | 8 PRO | G ID 0808-1 |
| . 444 | | = \1312UA | 415178 415233 | 411875 411875A 411961 | | |
| n ac | | | | | | *- |

| ODE1 1 C400 OEA4 ODE3 0 4820 ODE4 0 7002 ODE5 0 6100 ODE6 0 7002 ODE7 1 6580 OEA4 | CKCET LD | L CYLEX | GET ERR CNT | | 80815660 |
|---|--|-----------------------------------|---|---|----------------------|
| ODE3 0 4820 | BSC | Z | SKIP IF ZERO | | 80815670 |
| ODE4 0 7002 | MDX | 23* | BR TD SET ERR | CTRL | 80815680 |
| ODE5 0 6100 | LDX | 1 0 | SET CNT TO ZER | .0 | 80815690 |
| ODE6 0 7002 | MDX | ≉&2 | BR TD SETUP RT | | 80815700 |
| ODE7 1 6580 OEA4 | LDX | II CYLEX | SET IN ERR CTR | L CNT | 80815710 |
| • | * | | | | 80815720 |
| ODE9 0 6208 | SETUP LDX | 2 8 | SET X3 CTRL TD | - 8 | 80815730 |
| ODEA O C30B | LD | 3 11 . | GET INITIAL AD | DR | 80815740 |
| ODEB 0 1803 | SRA | 3 | CLR HD/SECT | | *80815750 |
| ODEC 0 1003 | SLA | 3 | CLR HD/SECT | | 80815760 |
| ODED 1 D500 OEB8 | CSADR STO | L1 CYLET | PUT SECT ADDR | IN CET | 80815770 |
| ODEF 0 7101 | MDX | 1 1 | ADV CYL ERR TB | L CTRL | 80815780 |
| ODFO 0 83FF | Α | 3 -1 | ADV SECT ADDR | | 80815790 |
| ODF1 0 72FF | MDX | 2 -1 | DEC ADDR C-S C | TRL | 80815800 |
| ODF2 O 70FA | MDX | CSADR | BR TO LOOP | | 80815810 |
| 0DF3 0 93FF | S | 3 -1 | RE-ADJ ADDR CT | RLS : | 80815820 |
| ODF4 O D30B | STO | 3 11 | SET IN PROPER | ADDR | 80815830 |
| ODF5 1 7408 OEA4 | MDX | L CYLEX,B | INCREMENT ERR | CNTR | 80815840 |
| ODF7 1 4C80 ODDA | BSC | I CETRT | RETURN TO CALL | RT SX | 80815850 |
| | * | | | * | 80815860 |
| | *•••••• | • • • • • • • • • • • • | | • • • • * | 80815870 |
| | * | SET | BAD PACK ERR SWI | ТСН ≭ | 80815880 |
| | * | | • | * | 8081589 0 |
| | ********* | • • • • • • • • • • • • | •••••• | • | 80815900 |
| ODF9 0 C3D1 | DSKNG LD | 3 -47 | GET NOP INST | SE | 80815910 |
| ODFA 1 D400 0E63 | STO | L DNGSW | SET BR INST TD | NOP | 80815920 |
| ODFC 0 70E4 | MDX | CKCET | BR TO SETUP | SX | 80815930 |
| | * | | | | 80815940 |
| | * | | | | 80815950 |
| | * | CE D | ATA ERR ROUT | | 80815960 |
| | * | | | | 80815970 |
| 0DFD 0 0000 | CETYP DC | 0 | SAVE ENTRY | | 80815980 |
| OUFE 0 4334 | BSI | 3 52 | BR TD MSAG FOR | M 2 MC | 80815990 |
| ODFF O EOCE | DC | /EOCE | MSAG # | | 80816000 |
| 0E00 0 0000 | DC | 0 | NO ERR LOOP AD | DR | 80816010 |
| TOPOL 1 4080 ONED | B S C ^r | I CETYP | ,,RĘTUŖŅ ŢŌ MAIN | LINE | 80816020 |
| ODE6 0 7002 ODE7 1 6580 OEA4 ODE9 0 6208 ODEA 0 C30B ODEB 0 1803 ODEC 0 1003 ODED 1 D500 OEB8 ODEF 0 7101 ODF0 0 83FF ODF1 0 72FF ODF2 0 70FA ODF3 0 93FF ODF4 0 D30B ODF5 1 7408 OEA4 ODF7 1 4C80 ODDA ODF0 0 70E4 ODF0 0 70E4 ODF0 0 70E4 ODF0 0 0000 ODFE 0 4334 ODFC 0 70E4 ODF0 0 0000 ODFE 0 4334 ODFF 0 EOCE OE00 0 0000 OE01 1 4C80 ODFD OE03 0 40F9 OE04 0 705E | * | | | | 80816030 |
| 0503 0 4059 | CESX3 BSI | CETYP | BR TO TYPE ERR | MSAG | 80816040 |
| 0E04 0 705E | MUX | DNGSW | BR TD CDNTINUE | | 80816050 |
| 0505 0 /057 | # 65647.00* | | | | 80816060 |
| 0504 0 7049 | CESX / BSI | CETYP | BR TO TYPE ERR | MSAG | 808 16070 |
| 0E05 0 40F7 0E06 0 7048 0E07 0 C3FF 0E08 0 0300 | MUX | CEXA | BK TO CONTINUE | | 80816080 |
| | ~••••••••••••••••••••••••••••••••••••• | • • • • • • • • • • • • • | • • • • • • • • • • • • • • • • • • • | • • • • • * | 80816090 |
| | * | 0.501 | N DOUTTEE S | * | 80816100 |
| | * | BEG1 | N RUUTINE 2 | * | 80816110 |
| | ** | | | * | 80816120 |
| 0E07 0 C3EE | FO2AA ID | 21 | CET MORD COUNT | •••• " | 80816130 |
| 0E08 0 D30D | STO | 3 13 | SEL MOKO COOMI | FUK IE | 80816140 |
| 0E09 0 C3CF | LD | J 1J | VEWD ID OUT | | 80819120 |
| 0E0A 0 D308 | CTO | 2 11 | DESIRED CYLINDE SECTOR SET TO (| | 80816160 |
| OEOB 0 6500 0580 | 101 | L1 1456 | NUMBER OF SECTO | TR S | 80816170 |
| × | **** | | | y | 80816180 |
| | * | | | * • • • • * * | 80816190 |
| | * | SELI | CTIDN OF NEXT SE | | 80816200 80816210 |
| 0 | * | 322 | | * | 80816220 |
| | * | •••••• | • | · · · · · · · · · · · · · · · · · · · | 80816230 |
| 0E0D 0 6923 | FO2AB STX | 1 FO2XB | SAVE X1 XTANT | | 80816240 |
| 0E0E 0 4384 | BSI | 3 -124 | DCABP RT | sc | 80816250 |
| OEOF O 43AE | FO2SK BSI | 3 -124 3 -82 3 -88 F02AD | DCSK RT | SC | 80816260 |
| 0E10 0 43AB | BSI | 3 -88 | DCRD RT | SC | 80816270 |
| 0E11 0 7008 | MDX | FO2AD | ERROR RETURN AD | DRESS | 80816280 |
| | * | • • • • • • • • • • • | ••••••••••• | *** | 80816290 |
| • | * | | | * | 80816300 |
| | * | TF : | D IS OK, GEN NEW | ∤ | 80816310 |
| | * | SECT | OR ADDRESS AND | * | 80816320 |
| | * | CONT | OR ADDRESS AND INUE TEST | * | 80816330 |
| | | | | | |
| 205524 | | | | | |
| 28FEB66 01MAY66 | | 04NOV66 010 | | | PROG ID |
| D. 415120 415120A | 415178 | 415233 411 | .875 411875A | 411961 | PAGE |
| | | | | | |

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2315 OISK INITIALIZER

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13A

| 2 1 74FF 0B93 4 0 1000 | FO2AC MDX L DCT&11,-1 OECR | EMENT SECTOR AOR | 80816340 80816350 80816360 | 0E44 0 C3C7 0E45 1 0400 0C57 | LO 3-57 STO L DCOA&2 | GET CE IO CEDC SET IN IDA | 8 |
|---------------------------|--|-----------------------------------|----------------------------------|--------------------------------------|--|--|---------------------|
| 5 1 6580 0E31 7 0 71FF | LDX II FO2XB GET | Y NDP X1 XTANT | 80816370 8081638 0 | 0E47 1 C400 0EA4 0E49 1 0400 0C58 | LO L CYLEX STD L OCOA&3 | GET ERR AMT SET IN IDA | 8 8 8 |
| 0 70F4 0 439F | 110V = ================================= | EMENT XR1 BY 1 INUE TEST | 80816390 80816400 | 0E4B 0 C3E5 | * LO 3 -27 | GET WC | 8 |
| | ************************************** | | 80816410 80816420 | 0E4C 0 030D | STO 3 13 · | PUT IN OCT TBL | 8 |
| | * ERR ANALYS | iss & Logging # | 80816430 80816440 | 0E4D 0 43AB 0E4E 0 70B6 | BSI 3 -85 MDX CESX7 | WR CE SECT SEVEN BR TD ERR ROUT | SC 8 |
| 0 C30B | *F02AD LD 3 11 GET (| ** OESIRED AODR | 80816450 80816460 | | * | ECT 3 SETUP | 8 8 |
| 0 F30C | EOR 3 12 CMP V | WITH ACTUAL | 80816470 80816480 | 0E4F 0 C3C6 | 学 | | 8 |
| 0 1803 1 4C20 0E25 | | SECTDR/HEAD F CYL NDT EQ | 80816490 80816500 | 0E50 0 438C 0E51 1 C400 0EA4 | CEXA7 LD 3 -58 BSI 3 -116 LD L CYLEX | GET PATTERN FILL IDA WITH SAME GET ERR AMT | SC 8: |
| 0 C30B | | DESIRED AODR | 80816510 80816520 | 0E53 1 4C18 0E57 0E55 1 4400 0E99 | BSC L FO3XZ,&- | BR NO ERR CNT | 8 |
| 0 F30C 0 100C | EDR 3 12 CMP W | WITH ACTUAL | 80816530 | 0233 1 4400 0299 | BSI L FIDAX | BR TO SET ERR IN IDA | 80 |
| 1 4C20 0E29 | SLA 12 CLR C BSC L FO2AF,Z BR IF | CYLINDER AOOR = SECT/HO NDT EQ | 80816540 | 0E57 0 C3FD | F03XZ LD 3 -3 | GET ADOR | 8(|
| 0 70ED | MDX FO2AC FALSE | E ERR CONTINUE | 80816550 80816560 80816570 | 0E58 0 EBD8 0E59 0 D30B | OR 3 -40 STO 3 11 | OR IN ADOR OF CYL PUT IT IN DCT | 80 |
| 0 4386 0 43A8 | FOZAE BSI 3 -122 DRESK | | 80816580 | 0E5A 0 C3C7 | * LO 3 -57 | CET CE ID CEDC | 80 |
| 7005 0 43A2 | | RORETURN | 80816590 80816600 | 0E5B 1 D400 0C57 | STO L OCDA&2 | GET CE ID CEDC PUT 10 IN 10A | . 80 |
| | BSI 3-94 RESTA | ART EXIT SX | 80816610 | 0E5D 1 C400 0EA4 | LD L CYLEX | GET ERR AMT | 86 |
| 4334 | FO2AF BSI 3 52 BR TD |) MSAG FDRM 2 MC | 80816620 80816630 | 0E5F 1 D400 0C58 | STO L DCDA&3 | PUT WC IN IOA | 86 |
|) E020 L 0E0F | DC /E020 MS | SAG # | 80816640 | 0E61 0 43AB | BSI 3 -85 | WRITE CE SECT THREE | 80 |
| 43A2 | | ON ERR RT EXIT SX | 80816650 | 0E62 0 70A0 | MDX CESX3 | BR TD ERR ROUT | 38 3 <i>2</i> 38 |
| | * | RT EXIT SX | 80816660 80816670 | 0543 0 7003 | * | | 80 |
|) 4334) E021 | | MSAG FORM 2 MC | 80816680 | 0E63 0 7003 0E64 0 4328 | ONGSW MOX ETEST BSI 3 40 | BR TO TEST ERR CNT BR TD MSAG FORM O | 80 |
| 0000 | | AG # R LDDP AODR | 80816690 | 0E65 0 E066 | DC /E066 | MSAG # | 1C 80 80 |
| 43A2 | - 110 | RT EXIT SX | 80816700 80816710 | 0E66 0 0000 | OC 0 | ND ERR LDOP ADDR | 80 |
| 0000 | F00V8 00 - | ANT HOLDER | 80816720 80816730 | | ***************** | * | 80 |
| ٠ | * | | 80816740 | | ₹ CE E | RR TBL TEST RT * | 80 80 |
| | * | | 80816750 | 05 (7, 0, 60.26 | * | * | 80 |
| | * | * | 80816760 80816770 | 0E 67 0 CO3C 0E68 1 4C18 0E97 | ETEST LD CYLEX 8SC L DIPND, &- | GET ERR CNT S BR IF ZERD ERR CNT | E 80 |
| | * RDUTINE 3 W | R CE SECTORS # | 80816780 | | * | BR IF ZERU ERR UNI | 80 80 |
| | *••••• | * | 80816790 80816800 | 0E6A 0 C3F8 | WRCET LO 3-8 | GET WORD COUNT | 80 |
| 4388 4380 | FU3AA BSI 3 -120 RDY NE | BSY RT SEC | 80816810 | 0E6B 1 0400 0C31 0E60 0 6500 CBAD | STO L OCDUT LOX L1 /CBAO | CLEAR LINE CTRL BAO CYL ERR MSAG NUM | 80 |
| C3D8 | F03AB BSI 3 -128 OCARM * | | 80816820 80816830 | 0E6F 1 6D00 0C33 | STX L1 OCOUT&2 | SET ERR MSAG NUM OPA | 80 80 |
| 030B | F03AC LO 3 -40 GET DI STO 3 11 SET AC | ISK AODR | 80816840 | 0E71 0 C032 | LD CYLEX | GET TBL ERR CNT | 80 80 |
| C3E5 | LO 3 -27 GET WO | | 80816850 80816860 | 0E72 0 002 5 | STD ETCNT | SET IT IN CTRL WD | 80 |
| D30D 43AE | ST:0 3 13 SET WO | C | 80816870 | 0E73 0 6200 | * LDX 20 | SET XZ CNT CTRL | 80 |
| .565 | BSI 3 -82 SEEK C | CYL SC | 80816880 | 0E74 0 6100 | LDX 1 0 | SET X1 CNT CTRL | ··· 80 |
| | * CE SECT 7 SE | ETUP | 80816890 80816900 | 0E75 0 C3F8 0E76 0 1890 | LO 3 -8 | GET CNT CTRL | 80 |
| C3D 0 | * | | 80816910 | OC10 0 1090 | WRCPL SRT 16 | SHIFT IT TO EXT | 80 |
| 438C | LO 3-48 GET 13 BSI 3-116 OFILL | B13 PATTERN | 80816920 | 0E77 1 C600 0EB8 | LD L2 CYLET | GET ERR ADOR | 80 808 |
| C400 OEA4 | LO L CYLEX GET ER | | 80816930 80816940 | 0E79 1 D500 0C34 0E7B 0 7101 | STO L1 OCOUT&3 | SET IT IN DPA | 80 |
| 4C18 0E41 4400 0E99 | BSC L FO3XY, &- BR ND | ERR CNT | 80816950 | 0E7C 0 7201 | MOX 1 1 · · · MOX 2 1 | ADV CTRL X1 ADV CTRL X2 | 808 |
| 4400 0599 | BSI L FIOAX BR TD | SET ERR IN IOA | 80816960 | | * | ADV CIRE AZ | 808 808 |
| C3F9 | FO3XY LD 3 -7 GET SE | ECTDR ADOR | 80816970 80816980 | 0E70 0 1090 0E7E 0 93FF | SLT 16 | SHIFT FOR CNT | 808 |
| EB08 | OR 3 -40 DR IN | ADDR DF CYL | 80816990 | 0E7F 0 4820 • | S 3 -1 BSC Z | DEC CTRL 'SKIP-IF ZERD | 808 -: 808 |
| D30B | STD 3 11 SET IN | SECT-CYL ADDR | 80817000 | 0E80 0 70F5 | MDX WRCPL | BR LDDP | 808 808 |
| | | | 80817010 | | * | | 808 |

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2315 DISK INITIALIZER

| OE B1 | 0 438C | | | 8 S I | 3 | -1 16 | 8R TO FILL IOA | SC | 80818380 |
|--------|---------|---------|------------|-------------|---------|---------------------------|---|----------|----------|
| 0E82 | 1 4000 | ODCO | | 8\$C | L | FO1WR | 8R TO WRITE RT | SX | 80818390 |
| | | | * | | | | | | 80818400 |
| 0E84 | 0 C30B | | TST10 | LD | 3 | 11 | GET ADDR | | 80818410 |
| 0E B 5 | 0 4804 | - | - | 8 S C | | Ε | SKIP IF ADDR EVEN | | 80818420 |
| 0E86 | 0 70F5 | | | MOX | | PAT13 | 8R TO SETUP PAT E5 | | 80818430 |
| 0E87 | 0 70F8 | | | MDX | | PATE5 | 8R TO SETUP PAT 13 | | 80818440 |
| | | | * | | | | | | 80818450 |
| 0E88 | 0140 | | CYLET | 888 | Ε | 320 | CYLINDER ERR ACCUM | | 80818460 |
| - | | | * | 1 | | | | | 80818470 |
| | | | *#### | #### | ### | * | #################### | * | 80818480 |
| | | | *** | **** | *** | **** | ***** | * | 80818490 |
| | | | * . | | • • • • | | | * | 80818500 |
| | | | * | | | | | * | 80818510 |
| | | | * | | | END 0 | F INITIALIZATION | * | 80818520 |
| | | | * | | | | | * | 80818530 |
| | | | * | | | | • | * | 80818540 |
| | • | | | | | | ******** | * | 80818550 |
| | • | | *##### | * # # # # # | ### | * * # * # # # # # # # # # | ############# | ÷ | 80818560 |
| | | | * | | | | | | 80818570 |
| 0F F8 | 0 000F | | OMEGA | DC | | /000F | | | 80818580 |
| OFFA | | | UEUA | END | | EXEQD | R TO SEGIN XFER RT | | 80818590 |
| | STATEME | NTS FLA | GGED IN | | ΔBC | OVE ASSEMBL | | | 00010390 |
| | | | | | | | | | |

DATE 28FEB66 04N0V66 010CT67 01MAY66 01JUL66 01NOV67 02DEC68 PROG ID 0808-1 EC NO. 415120 415120A 415178 415233 411875 411875A PAGE 411961 14A 2315 DISK INITIALIZER

2315 DISK INITIALIZER

ABP

```
OBOC OAB6
 ADSKC 0A82 09F3 0A85 0A87 0A89 0A8B 0AB9
      OBO8 OA9C
 BEGIN 012C 081E
CDTBC 0995 09D0
CDTGX 09DA 09BC 09D9
 CDTLK 09C9 09ED
CDTNR 0981 083F
CDTRC 09A2 09A9 0A05
CDTRT 0992 0925 0945 0986 09D8 0A04
CDTSE 09AD 09A4
CDTSN 09B8 0929 0949 09DA 09DC
CESX3 0E03 0E62
CESX7 0E05 0E4E
CETRT ODDA ODD7 ODF7
CETYP ODFD 0E01 0E03 0E05
CEXA7 OE4F OE06
CHNBZ OA44 OAE1
CHNRA OAF3 0834
CHNRL OAF1 0B17
CHNRQ OADF 0A44 0B13
CHNSA OAE2 0832
CKCET ODE1 ODFC
CNTND 0C43 0C54
COUNT OC3B OB22
CSADR ODED ODF2
CYLEC ODD9 ODB8 ODDB ODDF
CYLET 0EB8 08F8 0DED 0E77 0E9C
DARMC 0A97 0A6B
DARMZ 0A9C 0A6F 0A95
DCABP OAAE OBOD
DCARM OA8B OA9A OBO9
DCBPR OAB6 OA80 OABO
DCBSY 0C13 0C10
DCBZR 0C22 0C15 0C1C 0C1F
DCBZY OC20
           0C1A
DCDA 0C55 0887 0891 0923 0943 094B 0997 09BE 09E6 0AEB 0B89 0E45 0E49 0E5B
            0E5F 0E9E
DCDLA OAF9 OB19
DCDSW 0803 0818
DÇ E
    0 D 9 7
DCEC
      OC1D OC12
DCELS OC28 OBDE OBE7 OBF4 OC00 OC01
DCELX 0C30 0C0C 0C16 0C2A
DC EOD 08BC 087C 0B2E
DCERC OCOD OCOB OC13
DCFMA OBC3 OBD7
DCFMB OBC9 OBBB
DCLGC 0C16 0C07
DCLGX 0C17 0BF5 0C02 0C20
DCLR 0C26 0C1B 0C1D
DCOSW OCO3 OBB5 OBCB OBE8
DCOUT 0C31 0BB4 0BBA 0BC0 0BC2 0BC4 0BC6 0BC8 0BCA 0BD0 0BD2 0BD4 0BD6 0BDC
           OBEO OBE2 OBE4 OBE9 OBEB OBED OBEF OBF1 OBF6 OBF8 OBFA OBFC OBFE
           OCO4 OCOF OC19 OC2D OE6B OE6F OE79, OE83 OE95
DCR BB 0990
DCRD 0936 095A 0963 0831 0DCD
DCRDY OAD6 OADE OB11
DCREL 098A 094A 0960
DCRE1 097B 0954 096C
DCRE2 097C 0955 0974
DCRGA 097D 094F
DCRHM 08AD 08AA
DCR MB
     0C2E
DCRND 08BE 08C0
DCRDK 0985 097E
DCRTN 08A7 090C 0B28
```

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DCR10 0938 0936
 DCR12 093C 0972
 DCR16 0945
 DCR19 095D 0964
 DCR20 0961
             0956
 DCR21 0965 0952
 DCR22 096D 097A
 DCR23
       0973 0969
 DCSK
       09EE 0A27 0B37
            0822 084D 0854 085B 085F 086D 086F 08B5 08C1 08DF 0926 0946 0958
             .095D 0961 0965 0976 0983 09B1 09C9 09D2 0A06 0A60 0A64 OAC8 0AE5
             OAF5 OAFF OC 26 ODC4 OE12 OE8D
 DCTL1 085B
            085E
 DCTL2 085F
            0B 3D
 DCTL3 0869
             0894 0898 08B3
 DC TL4 086F 087B 08D3
 DCTL5 0879 086B 08AF
 DC TRL 0859 0828 083C
 DCWBB 0934
 DCWEL 092E 092B
       091A 0B34 0DCB
 DCWR
 DC W10
      091F 091A
 DDSA
       087D 0873 0877
 DEND
       0B2D
 DEPA
       0853
            0808 0857
 DEXEQ OA9E OBOB
 DEXID
       OAAC OAA7 OAA8
DFILL OAE9 OAEE OB15
 DHMLE 0A5C 0A71
DHMNR 0A64 0A5E
 DHOME 0A56 0A8D
DIPA
      0821
            0806 084A
DIPND 0E97 0E68
DLA
       0818
            0801
DLABB OAFF
            0B48
DL AND
      08DB
            0805
DLNRT 08C1 08D7 0B41
DLNR1 08D4
            0'8C8
DLPA
       084C
            0807 0851
DM LCK
      0880
            0867 08A1 08A5
DMLE1 089F 0886
DMLE2
      08A3
            0890
DMLTC 0896
            088A 089D 08A2 08A6
DMLXT 089E
            0889
      0E63
DNGSW
            ODFA OEO4
DRASK
      0A72
            OABB
DRD
      0B30
            0985 0990
DRERT OAC1
           0C 50
DRESK
      OAB8
            OBOF
DR SKR OAC8 OB3E
DRSKX OAD2
            0A75
DSK
      0B36 0A10
DSKAO 0816
            0842
DSKA1---0817
DSKA2 0818
            0844
DSKA3 0819
DSKA4 081A
DSKA5 081B
DSKA6 081C
            0848
DSKA7 081D
           09F9 0A19 0A30
DSKBB 0A10
DSKBT OA1A OA13
DSKCR OAOE
           0C3F
DSKEE 0A01 0A3B
DSKER 0A12 0A0C
DSKIA OA1F
           09F1
DSKIS 0A24 0A1D
DSKNG ODF9 ODDD
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        DSKNR 0A06 0840
                                                                                              NTRXT 08EE
        DSK13 0A2A 09F5
                                                                                              OMEGA OFF8 080D
        DSPLA 09DE 09CB
                                                                                              PATES 0E80 OEAB 0EB7
        DSPLP 09E1 09EA
                                                                                              PATRT 0EA5
                                                                                                         OD8E
        DSPX1 09EB 09DE 09E5
                                                                                              PAT13 OEAC OEB6
              081A 0805
                                                                                              PEND 080D
        DVA
              08DD 0837 0AE3
                                                                                                    07FF 0820
                                                                                              PID
        DWR
              0833 092C 0934
                                                                                              PRTBL 0E81 0E87
        D13HM 0A3A 0A32
                                                                                              RAD
                                                                                                    0801 0875
        D13MR 0A37 0A43
                                                                                              RDY
                                                                                                    0B10 0AD8
        EDTA1 0813 0830
                                                                                              REL
                                                                                                    OB16 OAF7
        EDTA2 0814 082D
                                                                                              RELDV 0132 0AF1
        EDTA3 0815 082A
                                                                                              REQ
                                                                                                    0B12 0AE7
             0839 0A4A 0A4C 0A50 0A52 0A54
        EMF
                                                                                              REQDV 0131 OADF
        EMNRT 0A4A 083A
                                                                                              REST 082A
        END
             012E 0B1F
                                                                                              RID
                                                                                                    0800 0871
              0808
                                                                                              R SK
                                                                                                    OBOE OAD4
        ERROR 0130 OCOD
                                                                                              RSTRT OC4B OACE
        ETCNT 0E98 0E72 0E8F 0E91
                                                                                              RTN
                                                                                                    0827
        ETEST 0E67 0E63
                                                                                              RWACK 08F1 08FF 0918 0937
        EXEQD 081E OFFA
                                                                                              RWCKA 08FB 08FE
        EXQ 080A 0AA9
                                                                                              RWCKT 0901 08FB
        FIOAX 0E99 0E3F 0E55 0EA2
                                                                                              RWCKX 08FF 0BF4
        FIOAY OE9C OEA1
                                                                                              RWRT3 0916 0907
        FIOAZ OEA2
                                                                                              SETUP ODE9
        FLX
             OB14 OAEF
                                                                                              SKADJ 0A77 0A85
        FORMO 0880 0983 0881
                                                                                              SKOUT OA7E OA7A OA7D
        FORM1 0886 0887
                                                                                              START 012D 08D8 0A48 0825 0C24 0EBB
        FORM2 088C 0958 0961 0965 088D
                                                                                              STRT
                                                                                                   0824
        FORM3 08CC 08CD
                                                                                              SWO
                                                                                                    0802
        FORM4 08D8 08D9
                                                                                              SWI
                                                                                                    0803 0869 0BAD
        FRM4A 08E9 08E5
                                                                                              SW2
                                                                                                   0804 0824
        FRM4B 08F6 0BF2
                                                                                                    0805 0896 08A7 09C5 09E1
                                                                                              SW3
        FOIAA ODB3
                  087D
                                                                                              TERM
                                                                                                   080C 0AE4 0AF4
        FOLAB ODSC ODC9
                                                                                              TSTOO OEA9
        FO1AC ODC4 ODD8
                                                                                              TST10 OEB4 OEA7
        FOLAE ODDO
                  ODC1
                                                                                              UNTA1 0830 0825 0B2C 082F
        FO1AF ODD4 ODC3
                                                                                              UNTA2 082D 082B
                                                                                                                                18 FF 2 11355 115 16
        FO1RD ODC2 ODD3 ODD6
                                                                                              UNTA3 082A
        FOISK ODBD
                                                                                              WAIT1 089C 3001
        FO1WR ODCO
                  ODD2 OEAE 0E82
                                                                                              WAIT2 08BF 3002
        F02AA 0E07 0B7E
                                                                                              WRCET OE6A
        FO2A8 OEOD OE1B
                                                                                              WRCPL 0E76 0E80 0E92
       F02AC 0E12 0914 0E24
                                                                                              XNR 080A 0C45
       FO2AD OE1A OE11
                                                                                              END OF ASSEMBLY
       F02AE 0E25 0E10
       F02AF 0E29 0E22
       F02AG 0E2D 0E27
                                                                                                          FO2SK OEOF OE2B
       F02XB 0E31 0911 0E0D 0E15
       F03AA 0E32 .087F
       F03A8 0E33
       F03AC 0E34
       F03XY 0E41 0E3D
       F03XZ 0E57 0E53
       HALT 0133
       HNG
             081C
       IPA
             0806
       LHOLD 0E8D 0E85
       LIV
                 08D9 08EC 0AA0 0C43
             0809
       LOG
             012F 0C17 0E81
       LPA
             0807
       LSTRT 0EB7 0E84 0EB6
       MEND OB1E
       MLN 0808 0841 0850 08E4 0A46 0AFC 0C22 0EB9
       NTRER 0BF0 08E6 0BF0 7001
       NTRPT OBDE OBEE
       NTRST OBEB
DATE
        28FEB66 01MAY66 01JUL66
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1810 A/B FUNCTION TEST

PART NO. 21763BD PAGE I

PROGRAM LOADING PROGRAM OPERATION PROGRAM HALTS PROGRAM TERMINATION PROGRAM RESTART STATUS MESSAGES COMMAND MESSAGES DATA MESSAGES ERROR MESSAGES 5.1 DESCRIPTION OF TEST ROUTINES DESCRIPTION OF SUB-ROUTINES EDIT PROCEDURE

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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 1810 A/8 FUNCTION TEST

PART NO. 2196380 PAGE 1A

1. PURPCSE

THE 1910A/8 (13SD/44SD) FUNCTION TEST IS DESIGNED TO TEST EACH FUNCTION OF THE DISK FUR COMPLIANCE WITH THE PRODUCT SPECIFICATIONS.

THIS TEST IS WRITTEN TO ACCOMMODATE SYSTEMS WITH ONE OR MORE 13SD (1810A) OR 44SD (1810B) DISK DRIVES. THIS PROGRAM IS DESIGNED TO RUN ANY ONE OF THREE DISK DRIVES WHICH MAY BE ON THE SYSTEM.

SEE SECTION 3.2 (PATCH OPTIONS) FOR INFORMATION ON RUNNING MULTIPLE DRIVES, IN OVERLAP MODE.

2. PREREQUISITES

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L3SD (1810A) OR 44SD (1810B) DISK DRIVES. THIS PROGRAM IS DETHE D14GNOSTIC MONITOR PROGRAM USES 2,047 STORA R WORDS, AND THIS PROGRAM USES 2,047 STORAGE WORDS.

THIS PROGRAM REQUIRES THAT A PREVIOUSLY INITIALIZED DISK PACK BE INSTALLED ON THE DISK DRIVE TO BE TESTED AND THE DISK DRIVE BE MADE READY. ANY DISK PACK WHICH HAS BEEN PROPERLY INITIALIZED BY THE 2315 DIAGNOSTIC DISK INITIALIZATION PROGRAM MAY BE USED FOR THIS TEST.

3. USE PROCEDURE

3.1 PROGRAM LOADING
PLACE THE INITIALIZED DISK PACK IN THE 1810 TO BE TESTED AND FOLLOW THE STEPS BELOW.

1. DEPRESS START BUTTON.

 WAIT FOR THE MICHINE TO BECOME READY PRIOR TO EXECUTING THIS PROGRAM.

TO LOAD THE PROGRAM DECK, USE THE STANDARD LGADING PROCEDURE AS DESCRIBED IN THE DIAGNOSTIC MONITOR USE PROCEDURE.

3.2 PROGRAM OPERATION

STANDARD MONITCR OPERATING PROCEDURES APPLY. THESE PROCEDURES ARE SUMMARIZED HERE. SEE DM USE PROCEDURE FOR DETAILS OF PARTS 1-4 BELOW.

CLEAR STORAGE TO 7CFF.

. LCAD DIAGNOSTIC MONITOR

. SELECT MODE OF EXECUTION

SELECT MONITOR CONTROL OPTIONS
SELECT PROGRAM OPTIONS FROM.

TABLE 0 - PROGRAM CONTROL FUNCTION
TABLE 1 - ROUTINE SELECT FUNCTION
TABLE 2 - DEVICE SELECT FUNCTION
PATCH - RANDOM PATTERN SCLECTION AND
MULTIPLE DRIVE OVERLAP

SET CHECK STOP SWITCH TO "OFF" AND WRITE STORAGE PROTECT SWITCH TO "YES".

7. INSTRUCT MONITOR TO EXECUTE THIS PROGRAM.

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TABLE D - PROGRAM CONTROL FUNCTION (PROGRAM OPTIONS)
********* SET FUNCTION OD IN SENSE/PROGRAM SHITCHES G AND 1
* SENSE/PROGRAM *
                   (AS SHOWN).
* D 1 2 3 4 5 6 7 * 2. SET PID IN SENSE/PROGRAM SWITCHES 2 THROUGH 7
                  IAS SHOWN).
* D O O O 1 O O 1 * 3. SET DESIRED CONTROL OPTIONS IN DATA ENTRY SWITCHES 0-15.
              * 4. PRESS CONSDLE INTERRUPT.
DATA ENTRY SWITCHES
                                  *OESCRIPTION
D 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 *
                              1....TERMINATE PROGRAM
                         1 ..... BYPASS ALL PAINTOUTS EXCEPT ERROR *
                                   MESSAGES INDTE. . ERROR MESSAGES MAY *
                                   BE BYPASSED BY DM OPTION)
                       1.....LOCK ON ERROR-IF THIS SWITCH IS ON *
                                   ANY ERROR WILL CAUSE THE PROGRAM . .
                                   TO LOOP IN THAT SECTION UNTIL THIS *
                                   SWITCH IS CLEARED
                  1.....REQUEST ROUTINES TO PRINT ALL
                                   ERRORS (ROUTINES NORMALLY
                                   PRINT ONLY FIRST FRROR)
***********************
```

TABLE 1 - ROUTINE SELECTION

```
THESE SWITCHES CAN BE CHANGED AT ANY TIME.
   IF ZERO IS ENTERED. THE PROGRAM WILL NOT LOOP BUT WILL RUN ALL ROUTINES
******************** 1. SET FUNCTION OI IN SENSE / PROGRAM SWITCHES D AND 1
* SENSE/PROGRAM *
                    IAS SHOWN).
4 D 1 2 3 4 5 6 7 * 2. SET PID IN SENSE/ PROGRAM SWITCHES 2-7.
                    (AS SHOWN)
* D 1 D O 1 D O 1 * 3. SET DESIRED ROUTINE NUMBER (IN H.X) IN DATA ENTRY SWS.
               * 4. PRESS CONSOLE INTERRUPT.
               * 5. TO SELECT A STARTING ROUTINE
                    A. ENTER STARTING ROUTINE NUMBER IIN HEX)
                     B. START PROGRAM RUNNING
                     C. ENTER ROUTINE NUMBER O
DATA ENTRY SHITCHES
                                     *DESCRIPTION
* D 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
                                      ENTER DESIRED ROUTINE NUMBER
                         XXXX
                                       IN HEXADECIMAL. ROUTINE NUMBERS
                                      O-E HEX ARE LEGAL ENTRIES.
                                       NOTE- ENTRY OF AN ILLEGAL ROUTINE *
```

WILL CAUSE PROGRAM TERMINATION

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1810 A/B FUNCTION TEST

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TABLE 2 - DEVICE SELECTION

| ********* 1 SET FUNCTION 1D IN SENSE/PROGRAM SWITCHES D AND 1 |
|--|
| - SEUZENARGHUM + INZ ZHOMN)* |
| * 2. SET 21D IN SENSE/PROGRAM SWITCHES 2-7. |
| * D 1 2 3 4 5 6 7 * IAS SHOWN) |
| * 3. SELECT DESIRED DEVICE * 1 D O D 1 D D 1 * 4. PRESS CONSOLE INTERRUPT |
| 李本本本本書の表示を主意を主意を主意を主意を主意を主意を主意を主意を主意を主意を主意とは、 INTELINITY INTERINITY INTELINITY INTELIN |
| DATA ENTRY SWITCHES +DESCRIPTION |
| * U 1 2 3 4 5 6 7 8 9 1D 11 12 13 14 15 * |
| * D D D RUN THE CISK DRIVE ASSOCIATED WITH |
| THE FIRST DDEF ON THE EDIT CARD |
| * 1 0 D · · · · · · · · · · · · · · · · · · |
| THE FIRST DDEF ON THE EDIT CARD |
| * |
| RUN THE DISK DRIVE ASSOCIATED WITH |
| THE SECOND DDEF ON THE EDIT CARD. |
| * D O 1 RUN THE DISK DRIVE ASSOCIATED WITH |
| THE THIRD DDEF ON THE EDIT CARD. |
| · |
| *CAUTION. ANY BIT ON IN THIS FUNCTION OTHER THAN BITS 1 OR 2 WILL SELECT THE |
| DISK DRIVE ASSOCIATED WITH THE FIRST DDEF. |
| |

PATCH CPTIONS

THERE ARE SIX PATCH OPTIONS AVAILABLE WITH THIS PROGRAM. TO USE ONE OR ALL DE THESE OPTIONS MAKE UP PATCH CARDIS) AS SHOWN BELOW AND INSERT INTO THE DECK BEFORE THE BINARY END CARD. PUNCH THE CARDS STARTING IN COLUMN DNE AS SHOWN. VALUES TO BE PATCHED IN SHOULD BE TAKEN FROM A SUMMARY TABLE PRINTOUT.

NOTE- THESE OPTIONS MAY BE INSERTED, AFTER PROGRAM LOAD, THRU THE CONSOLE SHITCHES BUT GREAT CARE MUST BE TAKEN TO COMPUTE CORRECTED PATCH ADDRESSES USING NECESSARY RELOCATION FACTORS.

THESE TWO OPTIONS MAY BE USED IN THE CASE; OF A DISK WHICH IS FAILING ON SOME SET PATTERN. THE REGINNING NUMBER DESIRED MAY BE DETERMINED BY EITHER ERROR PRINTOUTS OBTAINED OR FROM THE SUMMARY PRINTDUT.

1. SELECTION OF FIRST RANDOM NUMBER TO BE USED BY THE RANDOM SEEK ROUTINE (4). THIS NUMBER WILL BE USED AS THE FIRST RANDOM NUMBER ON EVERY ROUTINE PASS. TO SELECT THIS OPTION, PUNCH THE FATCH CARD STARTING IN COLUMN DNE AS SHOWN.

> +OBIDBXXXX IB= BLANK) XXXX* HEXADECIMAL NUMBER WHICH IS USED TO DETERMINE THE FIRST SEEK. NOTE- A FULL FOLR DIGITS ARE ENTERED TO ALLOW PROPER RANDOM GENERATION BUT CNLY THE LEFT TWO DIGITS ARE USED BY THE SEEK RC :TINE.

SELECTION OF FIRST RANDOM NUMBER TO BE USED BY THE TWO RANDOM PATTERN WRITE-READ ROUTINES 19 AND 101. THIS NUMBER WILL BE USED AS THE FIRST RANDOM NUMBER ON EVERY ROUTINE PASS.

> +DB1EBXXXX IB= BLANK) XXXX= HEXADECIMAL NUMBER WHICH IS THE DESIRED START OF THE PATTERN.

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1810 A/B FUNCTION TEST

3

OPTIONS 3.4 AND 5 BELDW ALLDW CONTINUATION OF RANDOM GENERA-TIDN FROM A PREVIOUS LDAD OF THE PROGRAM. VALUES TO BE ENTERED CAN BE FOUND IN THE LAST SUMMARY TABLE PRINTED.

3. SELECTION OF FIRST PANDOM NUMBER TO BE USED BY THE RANDOM SEEK ROUTINE. THIS OPTION WILL CAUSE THE RANDOM PATTERN GENERATION TO CONTINUE FROM THE LAST NUMBER USED ON PRE-VIOUS LOAD OF THE PROGRAM.

+OB75BXXXX (B= BLANK)

4. SELECTION OF FIRST RANDOM NUMBER TO BT USED BY THE RANDOM WRITE-READ ROUTINE (9). THIS OPTION WILL CAUSE THE KANDOM PATTERN GENERATION TO CONTINUE FROM THE LAST NUMBER USED ON PREVIOUS LCAD OF THE PROGRAM.

+OB77BXXXX (B= BLANK)

5. SELECTION OF FIRST RANDOM NUMBER TO BE USED BY THE RANDOM WRITE-READ ROUTINE 110). THIS DPTION WILL CLUSE THE RANDOM PATTERN GENERATION TO CONTINUE FROM THE LAST NUMBER USED ON THE PREVIOUS LCAD OF THE PROGRAM.

+OB79BXXXX (B= BLANK)

- 6. RUNNING MULTIPLE DRIVES. TO RUN TWO DR MORE DRIVES IN OVERLAP PERFORM THE FOLLOW-ING STEPS.
 - A. DUPE THE PROGRAM CECK ONCE FOR EACH ADDITIONAL DRIVE TO BE RUN.
 - PATCH A PROGRAM ID INTO THE ADDITIONAL DECKS AS FOLLOWS (USE A PID IN THE RANGE D2-3F, WHICH WILL NOT BE IN-CLUDED IN THIS LDAD). PIDS D9,19, AND 39 ARE SUGGESTED.

+07FFBXXCO (B= BLANK)
EXAMPLE TD PATCH PID-19.
+07FF 19DD

- C. MAKE UP EDIT CARDS FOR THE ADDITIONAL DECKS USING THE PATCHED PID.
- D. LOAD ALL CECKS IN DVERLAP MDDE AND EXECUTE THEM. SELECT A DIFFERENT DISK DRIVE FOR EACH EXECUTION.

NOTE- THE PATCHED PID MUST BE USED IN PLACE OF PID 09 FDR FUNCTION SELECTION AND PROGRAM EXECUTION.

7. SELECTION OF ALTERNATE CYLINDERS FOR READ/WRITE ROUTINES.
THI! DPTIDN WILL CAUSE THE READ/WRITE ROUTINES (5,6,8,9,4,8,0,0,0) TO USE THE PATCHED CYLINDER NUMBER IN PLACE OF THE NORMALLY USED CYLINDER NUMBER.

+0816 XXXX MORMALLY CYLINDER DD1 (0D08 HEX)
+0817 XXXX HORMALLY CYLINDER D02 IOD1D HEX)
+0818 XXXX HORMALLY CYLINDER 201 (D648 HEX)
+0816 XXXX HORMALLY CYLINDER 202 (065D HEX)

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3.3 PROGRAM HALTS

THIS PROGRAM HAS NO NORMAL WAITS, UNLESS HE DIAGNOSTIC MONITOR OFFION DE HALT ON ERROR IS SELECTED, AND AN ERROR OCCURS. SEE DM USE PROCEDURE FOR THIS HALT.

3.4 PROGRAM TERMINATION

THE PROGRAM WILL NORMALLY TERMINATE AFTER ONE COMPLETE PASS. UNLESS THE DIAGNOSTIC MONITOR OPTION OF LOOP ALL PROGRAMS IS SELECTED. SEE DM USE PROCEDURE FOR THIS GPTION.

THE PROGRAM CAN BE MANUALLY TERMINATED IN DAT OF TWO WAYS.

1. BY THE MONITOR DE-EXECUTE DPTION.

NOTE- IF THE PROGRAM IS TERMINATED WITH AN INTERRUPT PENDING THE INTERRUPT WILL BE HANDLED BY THE MONITOR AND TREATED AS A SPURICUS INTERRUPT.

2. BY THE USE OF THE TERMINATE PROGRAM OPTION IN SWITCH FUNCTION 0.

THE PROGRAM WILL ALSO BE TERMINATED WHEN CERTAIN ERRORS OCCUR. SEE SECTION 4.2 (ERROR MESSAGES) FOR ERRORS WHICH CAUSE PROGRAM TERMINATION.

3.5 PROGRAM RESTART

THE PROGRAM CAN BE RESTARTED FOLLOWING ANY TERMINATION BY PER-FORMING A 'DE-EXECUTE' FOLLOWED BY AN 'EXECUTE' OPERATION THRU THE MONITOR.

PRINTOUTS

THE FOLLOWING SYMBDLS ARE USED IN ALL PRINTOUTS AND HAVE THE SAME MEANING IN ALL PRINTCUTS.

XXXX - THIS HEXADECIMAL WORD INDICATES THE TEST ROUTINE BEING RUN AT THE TIME OF THE PRINTOUT. IROUTINE ID-RID)

THIS HEXADECIMAL WORD INDICATES THE ACTUAL BEGINNING AD-DRESS OF THE TEST ROUTINE. (RCUTINE ADDRESS-RAD)

DDDO - THIS HEXADECIMAL WORD CONTAINS THE LAST DSW WORD RECEIVED FROM THE DISK

OOTF - FILE BEING RUN BY THIS PROGRAM.

T = FILE TYPE (A OR B)

F = FILE NUMBER (1,2 DR 3)

NOTE- ANY MESSAGE MODIFIER WHICH IS DESIGNATED AS DECIMAL WILL BE PRINTED IN DECIMAL DNLY IF THE NUMBER IS POSITIVE. IF ANY NUMBER SHOULD BE REGATIVE (DUE TO SOME HARDWARE ERROR) THAT MODIFIER IS PRINTED IN HEXADECIMAL.

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1810 A/B FUNCTION TEST

4.1 STATUS MESSAGES

0900 A000 XXXX YYYY DODD DOTF

MODEL DETERMINATION.
THE PROGRAM HAS DETERMINED (FROM THE DSW FAST ACCESS BIT AND THE SELECTED DEVICE'S AREA CODE) THAT THE DISK BEING RUN IS AS SHOWN BY "DOTF". THIS PRINTOUT OCCURS ONLY ONCE EACH TIME THE PROGRAM IS EXECUTED.

0900 A001 XXXX YYYY DOOD COTF AAAA

AAAA NUMBER OF RETRIES BEFCPE RECOVERY. ID: CIMAL)

RECOVERED SEEK ERROR. THIS PRINTOUT WILL ALWAYS BE PRECEEDED BY ONE OR MORE ERROR MESSAGES IUNLESS BY-PASS ERROR MESSAGES OPTION IS SELECTED! WHICH INDICATE THE ERROR OR ERRORS WHICH CAUSED THE SEEK RETRY. THIS PRINTOUT INDICATES THAT OSW ERRORS WERE NOT FOUND AFTER THE COMPLETION OF THE LAST SEEK CPERATION.

0900 A002 XXXX YYYY 0000 OOTF AAAA BBBB

AAAA = NUMBER OF DSW ERRORS BEFCRE RECOVERY (DECIMAL)
BBBB= NUMBER OF CCMPARE ERRORS BEFORE RECOVERY (DECIMAL)

RECOVERED READ ERROR. DATA FAILED TO COMPARE ONE OR MORE TIMES BUT WAS CORRECT AFTER THE NUMBER OF RETRIES PRINTED. THIS MESSAGE WILL ALWAYS BE PRECEEDED BY ONE OR MORE ERROR MESSAGES IUNLESS BYPASS ERROR OPTION IS SELECTEDI WHICH INDICATE THE ERROR OR ERRORS WHICH CAUSED THE RETRIES.

0900 A003 XXXX YYYY DODD DOTF AAAA

AAAA= NUMBER OR RETRIES BEFORE RECGVERY. IDECIMALI

RECOVERED WRITE ERROR. THIS MESSAGE WILL ALWAYS BE PRECEDED BY ONE OR MORE ERROR MESSAGES IUNLESS BYPASS EPROR MESSAGES OPTION IS SELECTED WHICH INDICATE THE ERROR OR ERRORS WHICH CAUSED THE RETRIES. THIS MESSAGE INDICATES THAT NO DSW WCRD ERRORS WERE FOUND AFTER THE LAST WRITE.

0900 A004 XXXX YYYY 000D DOTF

DFT TERMINATED. THE ERRORS WHICH CAUSE TERMINATION OF DFT PRECEDE THIS PRINTOUT. THE DFT MUST BE DE-EXECUTED AND RE-EXECUTED TO RERUN THE PRUGRAM.

0900 A005 XXXX YYYY DOOD OCTF AAAA BBBB

AAAA= NUMBER OF OSW ERRORS ENCOUNTERED. 12ECIMALI 8888= NUMBER OF CMP ERRORS ENCOUNTERED. 12ECIMALI

READ RETRY TERMINATEC.

THE READ ROUTINE RETRY PROCEDURE HAS BEEM TERMINATED, DUE TO COMPARE ERRORS. THIS PRINTOUT WILL BE PRECEDED BY ONE OR MORE ERROR
MESSAGES (UNLESS BYPASS ERROR MESSACES OPTION IS SELECTED! WHICH
INDICATE THE ERROR OR ERRORS WHICH CAUSED THE RETRIES.

0900 A000 XXXX YYYY DDDD DDTF

ATTEMPTS TO SEEK A CYLINDER AND VERIFY THE SEEK BY READING SECTOR ID*S RESULTED IN ONE OR MCRE FAILURES BUT THE LAST RETRY ATTEMPT WAS SUCCESSFUL.

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                                                                                    PAGE
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              4.2 CCMMAND MESSAGES
              0900 COGO XXXX YYYY SSSS FFFF
                    SSSS CONTENTS OF SWITCH FU CTION TWO IHEXADECIMALI
                    FFFF= ALWAYS FFFF THEXADECTE ALT
              SELECTED A DEVICE THRU SWITCH FUNCTION TWO WHICH IS NOT EDITED.
              0900 C001 XXXX YYYY D000 00TF
                    OPERATOR EPROR.
              .HE DEVICE SELECTED TO BE RUN DOES NOT HAVE A PROPERLY INITIAL-
              IZEO PACK INSTALLED.
              0900 COO2 XXXX YYYY DOOD COTF
                    XXXX CONTENTS OF SWITCH FUNCTION ONE IHEXADECIMAL)
              OPERATOR FREDR.
              AN INVALID ROUTINE HAS BEEN SELECTED FOR LOOPING.
              4.3 DATA MESSAGE
              0900 0001 XXXX YYYY ODDO DOTF PSCT SKCT SSKE HSKE
                                  DODO DOTF PSCT ROCT SRDE HRDE
                                  DOOD OOTF PSCT WRCT SWRE HWRE
                                  DOOD DOTF PSCT RECL
                                  DODO DOTE PSCT FRNS LRNS
                                  DDDD DOTF PSCT FRN1 LRN1
                                  DDCD DOTF PSCT FRN2 LRN2
                    PSCT= PASS NUMBER ETHIS REMAINS THE SAME FOR ALL SEVEN
                          LINES) ICECIMALI
                    SKCT= TOTAL NUMBER OF SEEKS ISSUED EXCLUSIVE OF RETRIESIDECIMAL)
                    SSKE TOTAL NUMBER OF SOFT SEEK ERRORS TOECHMALT
                     HSKE= TCTAL NUMBER OF HARD SEEK ERRORS IDECIMAL!
                     ROCT = TOTAL NUMBER OF READS ISSUED EXCLUSIVE OF RETRIESIDECIMALI
                     SRDE= TOTAL NUMBER OF SCFT READ ERPORS IDECIMALI
                    HRDE= TOTAL NUMBER OF HARD READ ERRORS IDECIMAL)
                    WRCT= TOTAL NUMBER OF WRITES ISSUED EXCLUSIVE OF RETRIES (DECIMALI
                    SWRE TOTAL NUMBER OF SOFT WRITE ERRORS IDECIMALI
                     HMRE= TOTAL NUMBER OF HARD WRITE ERRORS (CECIMALI
                    RECL= MUMBER OF WORDS WRITTEN ON A SECTOR BY A WRITE USING
                          A MORD COUNT OF 400. (DECIMAL)
                     FRNS= FIRST RANDOM SEEK ISSUEC BY THE RANDOM SEEK
                          ROUTINE IHEXADEC IMAL )
                     LRNS* LAST RANDOM SEEK ISSUED BY THE RANDOM SEEK
                          ROUTINE THEXADECIMAL)
                     FRM1= FIRST RANDOM DATA WORD USED BY ROUTINE 9 (HEXADECIMAL)
                    LRNI = LAST RANCOM DATA WCRD USED BY ROUTINE 9 (HEXADECIMAL)
                     FRN2= FIRST RANDOM DATA WORD USED BY ROUTINE 10 IMEXADECIMALI
                     LRM2* LAST RANCOM DATA WORD USED BY ROUTINE 10 THEX/DECIMAL)
               SUMMARY PRINTOUT. CCCURS AT THE END OF EACH COMPLETE PROGRAM
               PASS. ALL COUNTS ARE INITIALIZED TO ZERO WHENEVER THE PROGRAM IS
               EXECUTED. AND WILL CONTINUE TO ADVANCE UNTIL THE PROGRAM IS DE-EXECUTED.
               ALL COUNTS WILL ADVANCE FROM 0000 THRU 9999 AND THEN RESET TO 0000.
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1810 A/B FUNCTION TEST

4.4 ERROR MESSAGES

OPCC ECCL XXXX YYYY ODOO OCTF AAAA BBBB

AAAA = OATA WCRO OF LAST IDCC ISSUEO IHEXAOECIMAL)
BBBB = CCNTRCL WORD OF LAST ICCC ISSUEO IHEXAOECIMAL)

LDST INTERRUPT. FOLLOWING EACH SEEK, READ, OR WRITE
THE PROGRAM SETS UP A LOOP THRU THE MONITOR WAITING FOR INTERRUPT. IS THE
INTERRUPT HAS NOT OCCURED WITHIN A SPECIFIC NUMBER OF LOOPS THIS
PRINTOUT WILL DOCUR.

1F THIS PRINTOUT IS FOLLOWED BY A MUNITOR PRINTOUT INDICATING UNEXPECTED INTERRUPT (FOR THE DISK) THEN THE INTERRUPT OCCURED, BUT WAS AT LEAST ONE SECOND LATE.

0900 EOD2 XXXX YYYY DODD OOTF AAAA BBBB

AAA. = OATA WCRD OF LAST ICCC ISSUEO.. IHEXACECIMAL)
BBBB = CCNTROL WORO OF LAST ICCC ISSUEO (HEXACECIMAL)

SPURIOUS INTERPUPT. THIS PRINTOUT CAN ONLY CCCUR
WHEN THIS PROGRAM HAS REQUESTED THE DISK FROM THE MONITOR, BUT IS NOT
CURRENTLY EXTECTING AN INTERRUPT.

0900 ECG3 XXXX YYYY 0000 DOTF

INCORRECT DSW.
THE DISK IS BUSY AND/OR NOT READY WHEN IT SHOULD BE BOTH READY AND WOT BUSY. THIS CHECK IS MADE PRIOR TO ISSUING ANY SEEK, PEAD, OR WRITE. AS LONG AS THE DISK REMAINS BUSY AND/OR NOT READY THIS PRINTOUT WILL REPEAT APPROXIMATELY EVERY 12 SECONDS UNLESS THE PROGRAM IS DE-EXECUTED.

0900 FOO4 XXXX YYYY DDOO OCTF AAAA BBBB

AARA = DATA WORD OF ICCC JUST ISSUED (HEXADECIMAL)
8888 = CONTROL WORD OF ICCC JUST ISSUED (HEXADECIMAL)

INCORRECT DSh. 1
THE DISK IS NOT BUSY ANO/OR READY WHEN IT SHOULD BE BOTH BUSY AND NOT READY. THIS CHECK IS MADE IMMEDIATELY AFTER EXECUTION OF EVERY SEFK, READ, CR WRITE. TH(S MESSAGE IS PRINTED ONLY ONCE, FOLLOWING WHICH THE PROGRAM ENTERS A LCOP THRU THE MONITOR CHECKING FOR LCST INTERRUPT.

OGCC ECD5 XXXX YYYY DOOD OOTF AAAA BBBB

AAAA= CATA WCRO OF LAST 10CC ISSUED (HEXADECIMAL)
BBBB= CONTROL WORD OF LAST 10CC ISSUED (HEXADECIMAL)

INVALID SEEK ADORESS IIPIDB CNLY). AFTER A SEEK THE OSW INDICATED A SEEK ERROP WHICH WAS AN INVAL(O ADDRESS EPROR. THIS OPERATION WILL BE RETRIED A MAXIMUM OF SEVEN TIMES. NOTE- IF THE LOCK ON ERROR

OPTION IS SELECTED THIS ROUTINE WILL LOOP UNTIL THE SWITCH IS CLEARED.

AAAA=OECIMAL CYLINDER NUMBER SEEKED FRUM. BBBB-OECIMAL CYLINDER NUMBER SEEKED TD.

HARD SEEK ERRDR. (IBIDB CNLY) EIGHT SEEKS HAVE ALL RESULTED IN SEEK ERRORS WHICH ARE INVALIO ADDRESS ERRORS.

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0900 E007 XXXX YYYY OODO ODTF AAAA BBBB

AAAA- DATA WORD OF LAST ICCC ISSUED (HEXADECIMAL)
BBBB- CONTROL WORD OF LAST ICCC ISSUEL (HEXADECIMAL)

SEEK INCOMPLETE (1810B CNLY). AFTER A SEEK THE OSW WORD INDICATES A SEEK ERROR WHICH IS A SEEK INCOMPLLIE ERROR ON THE 1810B. SEEK CPERATION WILL BE RETRIED A MAXIMUM OF SEVEN TIMES.

09DC EDOB -THIS MESSAGE TO IS NOT USED.

CSCO E009 XXXX YYYY DODD COTF

DSW READ ERROR. THE DATA READ WILL BE CHECKED FOLLOWING THIS PRINTOUT. THE ROUTINE WILL THEN ENTER A RETRY OPERATION. UP TO A MAXIMUM OF SEVEN RETRIES WILL BE EXECUTED.

NOTE- IF THE LOCK ON ERROR OPTION IS SELECTED THE ROUTINE WILL LOOP IN THIS READ UNTIL THE SWITCH IS CLEARED.

09DO EDDA XXXX YYYY DOOD DOTF AAAA BBBB

AAAA= NUMBER OF TIMES OSW ERRCRS WERE FOUND (DECIMAL)
BBBB= NUMBER OF TIMES COMPARE ERRORS WERE FOUND (DECIMAL)

HARD DSW READ ERROR. READ OPERATION WAS UNSUCCESSFUL AFTER EIGHT TRIES.

0900 E005 XXXX YYYY 0000 DOTF

DSW WRITE ERROR. THE RETRY PROCEDURE WILL BE INITIATED FOR THE WRITE. NOTE- IF THE LOCK ON ERROR OPTION IS SELECTED THE ROUTINE WILL LOOP IN THIS WRITE OPERATION UNTIL THE SWITCH IS CLEARED.

090C EDOC XXXX YYYY DOOD DOTF AAAA

AAAA= NUMBER OF WRITE DSW ERRORS (DECIMAL)

MARD WRITE ERROR. THE DSW WORD INDICATED AN ERROR DN ALL OF EIGHT WRITES.

0900 EOOD XXXX YYYY DOOD OOTF AAAA BBRB CCCC

AAAA- CYLINOER NUMBER SEEKEO FROMIHEXADECIMAL)
BBBB- CYLINOER NUMBER EXPECTED (HEXADECIMAL)
CCCC- CYLINDER NUMBER READ FROM OISK (HEXADECIMAL)

SEEK ERROR OCCURRED. ATTEMPTED TO SEEK CYLINDER BBBB FROM CY-LINDER AAAA, BUT WHEN SECTOR IO'S WERE READ AFTER THE SEEK, THEY INDICATED THAT THE DISK ACTUALLY REACHED CYLINDER CCCC. THIS WAS DETERMINED BY READING ALL EIGHT SECTOR IO'S AND THEN CHECKING FOR THEM CONTAINING THE SAME CYLINDER NUMBER. SEEK RETRY WILL BE INITIATED USING THE CYLINDER NUMBER READ AS THE PRESENT ARM POSITION. NOTE IF THE LOCK ON ERROR CPTION IS SELECTED THIS ROUTINE WILL LOOP UNTIL THE SWITCH IS CLEARED.

O900 EODE XXXX YYYY DDOD OOTF AAAA BBBB CCCC EEEE
DDDD DOTF FFFF GGGG HHHH JJJJ

MODIFIERS, AAAA THRU JJJJ CONTAIN THE SECTOR ID'S IN HEXADECIMAL IN THE ORDER READ.

READ ERROR.

ISSUED A SEEK OPERATION AND ATTEMPTED TO VERIFY THE SEEK. HOWEVER,
WHEN SECTOR ID/S WERE READ FROM THE CYLINDER, THEY DID NOT CONTAIN THE
SAME CYLINDER ID OR WERE NOT SEQUENTIAL ON ALL OF EIGHT READS. THE
181D A/B FUNCTION TEST IS TERMINATED. IF A RERUN IS DESIRED, THE
PROGRAM MUST BE DE-EXECUTED AND RE-EXECUTED.

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1810 A/B FUNCTION TEST

0900 ECCF- THIS MESSAGE ID IS NOT USED.

0900 ED10 XXXX YYYY DDDD COTF AAAA BEBE CCCD OOEF GI GG (LINE 11 DDDD GGTF HHHH JJJJ KKKK (LINE 21 DDDD GOTF LLLL (LINE 31

AAAA- CYLINDER NUMBER EXPECTED (DECIMAL) _BBBB- CYLINDER NUMBER READ FROM THE DISK (DECIMALI COCD- SECTOR ID EXPECTED C- HEAD NUMBER (0 OR 1) D- SECTOR NUMBER (0 THRU 3) DOEF- SECTOR ID READ FROM THE DISK E- HEAD NUMBER (O OR 1) F- SECTOR NUMBER (0 THRU 3) GGGG- NUMBER OF WORDS EXPECTED IN DECIMAL HHHH- WORD NUMBER IN RECORD IN DECIMAL(1 THRU NUMBER OF WORDS READ) JJJJ- DATA EXPECTED (HEXADECIMAL)

KKKK- DATA RECEIVED (HEXADECIMAL) -NOTE-1/O AREA IS PRESET TO FFFF

DATA CCMPARE FRRCR(S). THE ROUTINE ID (RID) IS AN IMPORTANT CIVE AS TO THE MEANING OF THIS MESSAGE. CHECK THE ROUTINE DESCRIPTION (SECTION 5.1) BEFORE CON-TINUING WITH THIS MESSAGE. PRICE 10 ISSUING A READ X10, THE I/U AREA (STARTING AT COCO HEXT IS SET TO HEXADECIMAL *FFFF*. AFTER THE READ INTERRUPT HAS OCCURRED. THE DATA IS CHECKED FOR ERRORS. THE FIRST LINE OF THE ERROR MESSAGE WILL INDICATE IF THE SECTOR ID JUST READ WAS AS EXPECTED. THIS LINE IS PRINTED AN DECIMAL AND IF THE SECTOR ID IS IN ERROR, THE SECOND WILL REPEAT THE SAME INFORMATION, ONLY IN HEMADECIMAL FOR BIT BY BIT COPPARISON.

LLLL- TOTAL NUMBER OF BAD DATA HORDS (DECIMAL)

NOTE THIS ROUTING NORMALLY PRINTS ONLY THE FIRST ERROR UNLESS THE OPTION PRINT-ALL-ERRORS IS SELECTED.

LINE 2 IS REPEATED FOR THE WORD PRECEEDING THE BAD WORD, THE BAD WORD AND THE WORD FOLLOWING THE BAD WORD. FOR EXAMPLE, ASSUME THAT WORD I (SECTOR ID) IS INCORRECT. ASSUME WE EXPECTED CYLINDER 1. SECTUR OO AND THE DATA BEING READ WAS ESES. THE PRINTOUT WOULD LOOK LIKE THE FOLLOWING.

*****SAMPLE PRINTOUT SAMPLE PRINTOUT SAMPLE PRINTOUT SAMPLE PRINTOUT*********** 0900 E01C XXXX YYYY DD00 D0TF 0001 0000 0000 0000 0321

PDDD CDTF 0301 000B 0000 DDDD DOTF 0002 E5E5 E5E5

DDOD DOTF 0001 *****SAMPLE PRINTOUT SAMPLE PRINTOUT SAMPLE PRINTOUT***********

THIS PRINTCUT SHOWS THAT THE CYLINDER NUMBER WAS READ WRONG. IT FURTHER SHOWS THAT WORD I CONTAINED THE INCORRECT CYLINDER NUMBER. BUT THE CORRECT SECTOR 1D. WORD 2 CONTAINED THE CORRECT DATA. THE NUMBER OF WORDS PEAD WAS 321 AND TOTAL ERRORS WAS 1. THEREFORE ONLY THE CYLINDER NUMBER WAS IN ERROR.

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IBM MAINTENANCE DIAGNOSTIC PROGRAM EDR THE 1800 SYSTEM PART NO. 2196380 1810 A/B FUNCTION TEST AS A SECOND EXAMPLE ASSUME THAT WORDS 3 AND 5 REA. INTO CORE BAD. BUT ALL CTHER MORDS WERE READ CORRECTLY. ASSURE ALSO THAT THE OPTION FOR PRINT ALL ERRORS IS SELECTED. (CYLINDER 1. SECTOR O AND DATA) *****SAMPLE PRINTCUT SAMPLE PRINTCUT SAMPLE PRINTCUT SAMPLE PRINTCUT*********** 0900 E010 XXXX YYYY DDDD GOTF 0001 0101 0000 0000 0321 (LINE 11 DCDD COTF 0002 1313 1313 (LINE 2) DDDD CC1F 0003 1313 0313 (LINE 31 DDDD DOTF 0004 1315 1313 (LINE 41 DDDD DOTF 0005 1313 0313 (LINE 51 DCCC OOTF 0006 1313 1313 (LINE 61 DDDD DOTF 0302 ****SAMPLE PRINTCUT SAMPLE PRINTCUT SAMPLE PRINTCUT SAMPLE PRINTCUT THE PRINTOUT SHOWS 2 TOTAL ERRORS AND MORDS 3 AND 5 HAVE DROPPED BIT 3. ALL CIHER WORDS ARE CORRECT. IF THE PRINT-ALL-ERRORS OFFICH HAD NOT BEEN SELECTED THEN LINES 4 AND 5 WOULD NOT HAVE APPEARED IN THIS PRINTOUT. THE WCRD PRECEEDING AND WORD FOLLOWING THE ERROR WORD ARE PRE-SENTED IN THE PRINTOUT TO PROVIDE AS MUCH OF THE PATTERN USED AS PRACTICAL, ESPECIALLY FOR THE RANGEM PATTERN ROUTINES. 0900 ECIL XXXX YYYY DDDD GOTF AAAA BBBB CCCD CCEF GGGG AAAA- CECIMAL CYLINDER NUMBER EXPECTED. BBB3- DECIMAL CYCINDER NUMBER READ FROM DISK. OOCD- SECTOR ID EXPECTED. C- HEAD NUMBER TO CR II D- SECTOR NUMBER (0 - 3) OOEF- SECTOR ID READ FROM DISK. E- HEAD NUMBER (O OR 1) F- SECTOR NUMBER (0-31 GSSG- NUMBER OF WURDS THAT SHOULD HAVE BEEN READ. (DECIMAL) INPUT TABLE CVERFLOW. PROBABLY TRANSFERRED MORE WORDS THAN THE WORD COUNT CALLED FOR ON A READ. AT LEAST ONE OF THE THO WORDS FOILGWING THE READ RECORD WAS NOT THE SAME AS THE PRESE VALUE OF HEXADECIMAL *FFFFF. 0900 EC12 XXXX YYYY DDDD CCTF AAAA AAAA- PRESENT CYLINDER NEMBER (DECIPAL) THE HOME INDICATOR IN THE DSW IS INCOMPRECED IN IS OFF WHEN PRESENT CYLINDER IS 0000 CR CN WHEN PRESENT CYLINDER IS NOT 0000. THIS CHECK IS MADE AFTER EVERY SEEK. 0900 EOI >- THIS MESSAGE ID IS NOT US: D. 0900 EC14 XXXX YYYY DDDD GGTF THE DSW FAST ACCESS BIT (BIT 131 IS INCORRECT. THE BIT IS ON FOR A 1810A CR OFF FOR A 1810B. 0900 EOLS XXXX YYYY DDDD CDTF A WRITE WITH A WOPD COUNT OF 400 FAILED TO CAUSE THE DSW *ANY ERROP* AND/CR *DATA ERROR! BITS TO BE SET. 09CO EC16 XXXX YYYY DDDD OCTE A READ WITH A WORD COUNT OF 370 FAILED TO CAUSE THE DSW "ANY ERROR" AND/DR "DATA ERROR" BITS TO BE SET.

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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM PART NO. 2'96380 PAGE 1810 A/B FUNCTION TEST 0900 E017 XXXX YYYY DODO DOTF AAAA AAAA= DECIMAL NUMBER OF WORDS WRITTEN A WRITE WITH A WORD COUNT OF 400 WROTE LESS THAN 331 MOROS. DR MORE THAN 35B. 0900 E018 XXX YYY DDD DDTF WRITING 400 WORDS ON CYLINDER 2-SECTOR ZERO DESTROYED DATA GN CYLINDER 2-SECTOR CNS. 0900 E019- THIS MESSAGE ID IS NOT USED. 0900 EOLA XXXX YYYY DDOD CCTF AAAA BB88 AAAA NUMBER OF TIMES DSW ERRORS WERE FOUND OURING READ-CHECK (DECIMAL) B88E= NUMBER OF TIMES DATA WAS TRANSFERRED BY A READ CHECK (CECIMAL I ROUTINE B SUMMARY. THIS PRINTOUT WILL OCCUR ONLY IF ROUTINE B ENCOUNTERED AN ERROR. 0900 EOLB XXXX YYYY DDOO CCTF INVALIO SEEK ERROR. A SEEK CYLINDER 203 WAS ISSUED AND THE INTERRUPT OSW OLD NOT CONTAIN THE SEEK ERROR INDICATION. THIS PRINTOUT OCCURS ONLY IF PUNNING A 18108 0900 ECIC XXXX YYYY DDOO CCTF C.E. MODE ERRCR. THE OISA WAS PLACED IN C.E. PODE AND THE DSW SENSED WITHOUT RE-SET. THE C.E. BUSY AND/OR C.E. NOT READY BITS WERE FOUND TO BE ON AT THIS TIME. NOTS- THIS ROUTINE IS ALWAYS BYPASSED IF RUNNING THE PROGRAM AS AN ON LINE FUNCTION TEST. 0900 EC10 XXXX YYYY DODD OCTF STORAGE PRCTECT ERROR. CNE WORD WAS READ FROM THE DISK INTO A STORAGE PROTECTED WORD AND THE STORAGE PROTECT VIGLATION BIT WAS NOT FOUND ON IN THE DSW WORD. THIS PRINTOUT WILL ALWAYS OCCUR IF THE WRITE STORAGE PROTECT SWITCH IS IN THE "NC" POSITION. NOTE- THIS ROUTINE IS ALWAYS BYPASSED IF RUNNING THE PROGRAM AS AN ON LINE FUNCTION TEST. 0900 EOIF XXXX YYYY DDDO OOTF AAAA AAAA* HEXAGECIPAL CONTENTS OF STORAGE PROTECTED LOCATION FOLLOWING THE READ. ITHIS WORD WAS PRESET TO *FFFF* PRIOR TO THE READ! STORAGE PROTECT ERROR. ONE WORD WAS READ FROM THE DISK INTO STORAGE PROTECTED LOCATION. OBCI. AND DATA WAS TRANSFERRED INTO THE PROTECTED WORD. THIS PRINTOUT WILL ALWAYS CCCUR IF THE WRITE STORAGE PROTECT SWITCH IS IN THE *NO POSITION. THIS ROUTINE IS ALWAYS BYPASSED IF RUNNING THE PROGRAM AS AN ON LINE FUNCTION TEST.

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1810 A/B FUNCTION TEST
              0900 EOIF XXXX YYYY ODDD OOTF ABCO
                    A8C0-
                        A= FIRST SECTOR COUNT FOUND (S/9:01
                        B= SECOND SECTOR COUNT FOUND IS/B=1)
                        C= THIRD SECTOR COUNT FOUND IS/8=21
                        D= FOURTH SECTOR COUNT FOUND 15/8=31
              SECTOR HIGH LOW ERROR.
              THE OSW WORD IS CHECKED FOR PROPER SECTOR COUNT STEPPING, STARTING
              WITH SECTOR ZERO. THE ROUTINE THEN CHECKS THE FOUR DIFFERENT COUNTS
              GETAINED AND PRINTS IF STEPPING IS INCORRECT. THIS ROUTINE IS ALWAYS
              BYPASSED IF RUNNING THE PROGRAM AS AN ON LINE FUNCTION TEST. OR IF RUN-
              ING IN OVERLAP.
              COMMENTS
              5.1 DESCRIPTION OF TEST ROUTINES
              OECTHAL
                        HEXADECIMAL
              ROUTINE
                        ROUTINE
              NUMBER
                        NUMBER
                                       OESCRIPTION "
                                       THIS IS A ROUTINE WHICH IS RUN DNCE EACH TIME
                                       THE PROGRAM IS EXECUTED. THIS ROUTINE IS
                                       ALWAYS RUN REGARDLESS OF ANY OPTIONS. THE
                                       ROUTINE WILL .-
                                       A. CHECK THE SECTOR COUNT IN THE DSW FOR PROPER
                                           STEPPING.
                                           NOTE- THIS ROUTINE IS ONLY RUN IF RUNNING OFF
                                           LINE AND IN NON-OVERLAP MODE.
                                          SENSE DISK OSW AND USE FAST ACCESS BIT TO
                                           DETERMINE DISK MODEL. ISSUE A SEEK TO HOME THROUGH THE XEQ ROUTINE. THE 'MODEL' IN-
                                           DICATOR SWITCH IS SET FOR 18108, CLEARED FOR
                                           1810A. THE FILE TO TAL. A3. B1. B2. R31 USED
                                           FOR PRINTOUTS IS CREATED ALSO.
                                       C. READ 321 WORDS OF HEXADECIMAL *1313* FORM
                                           CYLINDEP O. SECTOR O. VERIFY ALL DATA.
                                           SEEK CYLINDES 199 THRU THE VERFY ROUTINE.
                                           READ SECTOR & TO GET THE BAD CYLINDER
                                           TABLE. CHECK FHAT THE SECOND WORD OF
                                           THIS SECTOR IS HEXADECIMAL "CEDC". IF
                                           NOT, TERMINATE "HE OFT TO PREVENT POS-
                                           SIBLE CUSTOMER PACK CAMAGE.
                           1
                                       THIS ROUTINE WILL TEST THE OISK DSW INDICATORS.
                                       A. TEST THE FAST ACCESS OSW BIT. SHOULD
                                           BE DN FOR A 1810B AND DFF FOR A 1810A.
                                           IF THE MODEL SWITCH INDICATES 18108. ISSUE
                                           AN INVALID SEEK AND CHECK THE DSW SEEK
                                           ERROR BIT FOR BEING ON.
                                       C. PLACE THE DISK IN CE MODE AND CHECK THAT
                                           NEITHER CE DSW BIT IS DN.
                                       NOTE- C ABOVE IS BYPASSED IF THE PROGRAM
                                             IS RUNNING AS AN ON LINE FUNCTION TEST.
                                       LOOP THIS ROUTINE 50 TIMES.
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| 1810 A/B FUNCTION TEST | | | PART NO. 21963BD PAGE 8 | e . | IBM MAINTEN | | | |
|------------------------|----------------------------|--|--|-----|-------------|------------------|---|--|
| | | | | | 1810 A/B FU | NCTION TE | ST | |
| 2 | 2 | READ ONE WORD INTO A STORAGE PROTECTED CHECK THE DSW SPV BIT FOR BEING CN. CHALSC THAT NO DATA WAS TRANSFERRED INTO PROTECTED WORD. NOTE— THIS ROUTINE IS BYPASSED IF PUNN | HECK The Ing the | 0 • | | 11 | 8 | HRITE CYLINDER 2, OF 1 AND DATA OF E SEE THAT ALL WCRDS ZERO. LOOP THE RO |
| | 3 4 5 6 7 8 | NOTE— THIS ROUTINE IS BYPASSED IF PUNNIPRORGRAM AS AN ON LINE FUNCTION TO THIS ROUTINE 5D TIMES. EXECUTE SEEKS OF 2 IN. 1 OUT FROM HOME LINDER 202 (EXCEPT CYLINDERS 90—110) SEEKS OF 2 OUT, 1 IN FROM CYLINDER 202 (EXCEPT CYLINDERS 90—110). VERIFY ALL READING ALL EIGHT SECTOR IU S. SEEK CUT = SEEK TOWARD HOME. EXECUTE 100 RANDOM SEEKS WITHOUT SEEKI BETWEEN SEEKS. IF THE GENERATED NAME CAUSE AN INVALID SEEK OR A SEEK TO CYL 90—110 IT WILL BE REJECTED AND A NEW NIS GENERATED. VERIFY EACH SEEK EY PEA EIGHT SECTOR IC S. THE RANDOM NUMBER WILL NOT BE RESET EXCEPT BY RE-LCADING TO ESTABLISH A WIDE VARIETY OF RANDOM SEEKS. PROVISION IS MADE FOR EXECUTIN SAME SEQUENCE OF SEEXS THRU THE LOCK OF EPPOR OPTION, OR THE PATCH STARTING SE FREF.SEC. 3.2—PATCH OPTION) READ 320 WORDS OF HEXADECIMAL 1313 FRO LINDER 1, SECTOR D AND VERIFY THE DATA LOOP THIS ROUTINE 5D TIMES. READ 320 WORDS OF HEXADECIMAL ESES FRO DER 201, SECTOR 6 AND VERIFY CORRECT D LOOP THIS ROUTINE 5D TIMES. READ 320 WORDS OF HEXADECIMAL ESES FRO DER 201, SECTOR 6 AND VERIFY CORRECT D LOOP THIS ROUTINE 5D TIMES. READ WITH A WORD COUNT OF ZERO AND CHE IND AREA TO SEE THAT NO WORDS ARE TRAN FERRED. LOOP THIS ROUTINE 5D TIMES. READ WITH A WORD COUNT OF ZERO AND CHE IND AREA TO SEE THAT NO WORDS ARE TRAN FERRED. LOOP THIS ROUTINE 5D TIMES. READ WORDS ARE TRANSFERRED. IF ERRORS A FOUND ONLY THE FIRST SUCH ERROR IS PRIMITH TOTAL NUMBER OF ERRORS. (UNLESS ALL ERRORS OPTION IS SELECTED.) LOOP ROUTINE 5D TIMES. CERERATE 32D WORDS OF RANDOM DATA AND THESE WORDS ON CYLINDER 2, SECTOR 0. DATA WRITTEN AND CHECK THE DATA. IF I PARE DATA ERRORS HERE FOUND, RETRY THE INCT THE WRITE) UP TO SEVEN TIMES. THE ERRORS WERE FOUND USING THE SAME WATEL THE WRITE) UP TO SEVEN TIMES. THE ERRORS WERE FOUND USING THE SAME WATEL THE SWITCH IS CLEAPED. IF LOOK THE SAME WATEL THE SWITCH IS CLEAPED. IF LOOK THE SAME WATEL THE SWITCH IS CLEAPED. IF LOOK TOWN TO THE SEME WATEL THE SWITCH IS CLEAPED. IF LOOK TOWN THE SAME WATEL THE SWITCH IS CLEAPED. IF LOOK TOWN TOWN TOWN TOWN TOWN T | TC CY- EXECUTE TO HOME SEEKS BY NG HOME R WOULD INDERS UMBER DING ALL GENERATOR THE OFT G THE N EX CPT'ON. MM CY- READ. MM CYLIN- MATA. CCK THE INTEU ALONG THE PRINT THIS WRITE READ THE ANY COM- READ IF LOCK RCUTINE DATA | | | THE MENTRY REGIS | ALL THE SUBRO STATUS PRINTO ALL SUBRUUTING LECK ON ERROR THE SMALLEST ONCE AN ERROR EMAIN IN THE WHETHER THE OPTION HAS NOT THE ROUTINE ON TOR. THE ROUTINE OF THE ROUTINE | WRITE CYLINDER 2, 400 AND DATA LE HE 0 AND DETERMINE HO AND SAVE FOR THE S OR MORE THAN 358 W ERROR MESSAGE. CH ID IN CYLINDER 2, CHECK THAT BOTH AN BITS IN THE DSW AR 50 TIMES. NOTE— IF THE SECT 1 IS DESTROYED IT ROUTINE. WRITE 32D WORDS OF 2, SECTOR D. READ LOOP THIS POUTINE WRITE 32D WORDS OF LINDER 2D?, SECTOR RECT CATA. LOOP THIS ROUTINE OF SUB-ROUTINES OUTINES DESCRIBED PROVID OUTS. (PEFERENCE SECTION NES WHICH REQUIRE THE OF CRI OPTION. THIS CPTION POSSIBLE LOOP WHICH CAN RECCURS, AND THE CPTION CCURS, CROSS CRO |
| | | CPTION IS NOT SELECTED, OR IF NO ERROI LCCP THE ROUTINE FIFTY TIMES WITH FIF DIFFERENT RANDOM PATTERNS. NOTE— PROVISION IS MADE FOR ALWAYS US THE SAME PATTERN THRU THE PATCH (REF.SEC. 3.2-PATCH OPTION) | RS EXIST, TY ING | • 0 | | REQUE | STCD. IF NOT, THEN /, AND UPON RE | WILL FIRST CHECK TO SEE A CALL IS MADE TO THE TURN EXIT IS TO CALL+1. EQUESTED THE ROUTINE ME |
| 10 | A | SAME ROUTINE AS ROUTINE 9 EXCEPT THAT 202, SECTOR 6 IS USED. | CYLINDER | | | | | |

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| 11 8 WRITE CYLINDER 2, SECTOR D USING A WORD COUNT OF 1 AND DATA OF 555. READ THE SECTOR AND SEE THAT ALL WORDS EXCEPT THE FIRST ARE ZERO. LOOP THE ROUTINE 50 THESS. 12 C WRITE CYLINDER 2, SECTOR D WITH A WORD COUNT OF 400 AND DATA OF HEXDECIMAL 1313. READ SECTOR O AND DATA OF HEXDECIMAL 1313. READ SECTOR O AND DETERMINE HOW MANY WORDS WERE WRITTER AND SAVE FOR THE SUMPARY. IT LESS THAM 331 OR MORE THAN 350 WORDS WERE WRITTERN PRINT AN ERROR MESSAGE. CHECK THAT THE SECTOR ROUTINE OF THE SECTOR OF THE | OF 1 AND DATA OF 6965. READ THE SECTOR AND SEE THAT ALL MORDS EXCEPT THE FIRST ARE ZERO. LODP THE ROUTINE 5D TIMES. 12 C WRITE CYLINDER 2, SECTOR D MISH. A WORD COUNT OF AOD AND DETERMINE HIGH MANY MORDS NEW EMITTER OF AND DETERMINE HIGH MANY MANY MORDS NEW EMITTER OF AND DETERMINE HIGH MANY MANY MORDS NEW EMITTER OF AND DETERMINE HIGH MANY MARK MANY MANY MANY MANY MANY MANY MANY MANY | | | | |
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| OF 1 AND DATA OF ESSES. READ THE SECTOR AND SEE THAT ALL WERDS EXCEPT THE FIRST ARE ZERO. LODD THE ROUTINE SO TIMES. 12 C WRITE CYLINGER 2, SECTOR D WITH A WORD COUNT OF AOD AND DETERMINE HOW MANY WORDS WERE WRITTEN AND SAVE FOR THE SUMBARY. IF LESS THAN 331 OR MORE THAN 358 MORES WERE WRITTEN AND SAVE FOR THE SUMBARY. IF LESS THAN 331 OR MORE THAN 358 MORES WERE WRITTEN EVEN AND AND EFFORM OF THE SUMBARY. IF LESS THAN 331 OR MORE THAN 358 MORES WERE WRITTEN CHECK THAN 358 MORES WERE WRITTEN OF THE SECTOR TO IN CYLINDER 2, SECTOR CHECK THAT BOTH ANY ERROR AND ADD THIS ROUTINE OF THE SECTOR 10 IN CYLINDER 2, SECTOR BITS IN THE OSN ARE ON. LODD THIS ROUTINE 50 TIMES. NOTE—IF THE SECTOR 10 IN CYLINDER 2, SECTOR 1 IS DESTROYED IT WILL BE RESTORED BY THE ROUTINE. 13 D WRITE 32D WORDS OF HEXADECIMAL 1313 IN CYLINDER 2, SECTOR 0, READ AND VERIFY CORRECT DATA. LODD THIS ROUTINE SO TIMES. 14 E WRITE 32D WORDS OF HEXADECIMAL ESES IN CY- LINDER 2D. SECTOR 6. READ AND VERIFY CORRECT CATA. LODD THIS POUTINE SO TIMES. 5.2 DESCRIPTION OF SUB-ROUTINES ALL THE SUBROUTINES DESCRIBED PROVIDE ANY NECESSARY ERROR AND STATUS PRINTOUSS. (PEFERENCE SECTION 4.) ALL SUBRULTINES WILLOW WHICH CAUSES THE DIGINAL REGROUP IN THE 1-LXK CN ERROR OPTION. THIS CPTION WILL LODD THE SUBROUTINE IN THE SMALLST POSSIBLE LOOP WHICH CAUSES THE DIGINAL REGRO DICE AN ERROR OCCURS, AND THE CPTION IS SELECTED. THE ROUTINE WILL REMAIN IN THE LOOP AS LONG AS THE "LOCK ON ERROR" SUITCH IS ON, METHER THE ERROR FEURRE STEED TO SET MLSCF ENTRIES WHEN EXITING TO THE MONITOR. THE ROUTINE WILL SAVE INDEX REGISTERS I AND 2, SET AN MLSCF UPON RETURN FROM THE MONITOR STATES TOUTINE. WILL SUBROUTINE IS USED TO REQUEST USE OF THE DISK FRUN THE DIAGN NOSTIC MONITOR. THE ROUTINE WILL SAVE INDEX REGISTERS I AND 2, SET AN MLSCF UPON RETURN FROM THE MONITOR STATES TOUTINE. THIS ROUTINE WILL FIRST CHECK TO SEE IF THE DISK IS ALREADY IF NOT, THEN A CALL IS MADE TO THE DIAGNOSTIC MONITOR ROUTINE, REQUESTED. | OF 1 AND DATA OF 6965. READ THE SECTOR AND SEE THAT ALL MORDS EXCEPT THE FIRST ARE ZERO. LODP THE ROUTINE 5D TIMES. 12 C WRITE CYLINDER 2, SECTOR D MISH. A WORD COUNT OF AOD AND DETERMINE HIGH MANY MORDS NEW EMITTER OF AND DETERMINE HIGH MANY MANY MORDS NEW EMITTER OF AND DETERMINE HIGH MANY MANY MORDS NEW EMITTER OF AND DETERMINE HIGH MANY MARK MANY MANY MANY MANY MANY MANY MANY MANY | | | | • |
| AOO AND DETERMINE HOW MANY WORDS WERE WRITTEN AND SAVE FOR THE SUMMARY. IF LESS THAN 331 OR MORE THAN 358 MORES WERE WRITTEN AND SAVE FOR THE SUMMARY. IF LESS THAN 331 OR MORE THAN 358 MORES WERE WRITTEN, PRINT AN ERROR MESSAGE. CHECK THAT THE SECTOR IDEN CYLINDER 2, SECTOR IS HOT DESTROYED. CEEDS IN THE OSW ANE ON. 1000 THIS ROUTINE 30 TIMES. MOTE— IF THE SECTOR 10 IN CYLINDER 2, SECTOR 1 IS DESTROYED IT WILL BE RESTORED BY THE ROUTINE. MRITE 32D MOROS OF HEXADECIMAL 1313 IN CYLINDER 2, SECTOR D. READ AND VERIFY CORRECT DATA. LODP THIS POUTINE 50 TIMES. WRITE 32D WORDS OF HEXADECIMAL ESES IN CY- LINDER 2D, SECTOR 6. READ AND VERIFY COR- RECT LATA. LODP THIS ROUTINES DO TIMES. 3.2 DESCRIPTION OF SUB-ROUTINES ALL THE SUBROUTINES DESCRIBED PROVIDE ANY NECESSARY ERROR AND STATUS PRINTOUTS. PEFERENCE SECTION 4.) ALL SUBROUTINES WHICH REQUIRE THE OPTION ARE PROVIDED WITH THE *LICK CN ERROR* OPTION. THIS OPTION WILL LOOP THE SUBROUTINE IN THE SMALLST POSSIBLE LOOP WHICH CAUSED THE OPTIONLE ERROR. DICE AN ERROR OCCURS, AND THE CPTION IS SELECTED, THE ROUTINE WILL REMAIN IN THE LOOP AS LONG AS THE *LOCK ON ERROR* SWITCH IS ON, METHER THE ERROR PFCURRS CR NOT. IF NO ERROR OCCURS THEN THE OPTION HAS NO EFFECT. CALL BSI 2 STHLS—TB THE ROUTINE WILL SAVE INDEX REGISTERS 1 AND 2, SET AN MISCE UPON RETURN FROM THE MOITIOR THE SUBROUTINE WILL REMATY, AND EXIT TO THE MCHITOR "START" ROUTINE. UPON RETURN FROM THE MOITIOR THE SUBROUTINE WILL RESTORE INDEX REGISTERS 1 AND 2 AND BRANCH TO CALL+1. BSI 2 ZRQOV—TB THIS SUBROUTINE IS USED TO REQUEST USE OF THE DISK FRUM THE DIAG— NOSTIC MONITOR. THE ROUTINE WILL SAVE INDEX REGISTERS 1 AND 2, SET AN MISCE HINTS, AND EXIT TO THE MCHITOR "START" ROUTINE. UPON RETURN FROM THE MOITIOR THE SUBROUTINE WILL RESTORE INDEX REGISTERS 1 AND 2 AND BRANCH TO CALL+1. | 400 AND DETERMINE HOW MANY WORDS WERE WRITTEN AND SAVE FOR THE SUMMARY. IF LESS THAN 331 OR MORE THAN 358 MORES WERE WRITTEN AND SAVE FOR THE SUMMARY. IF LESS THAN 331 OR MORE THAN 358 MORES WERE WRITTEN, PRINT AN ERROR MESSAGE. CHECK THAT THE SECTOR IDEN CYLLINGER, SECTOR I IS MOT DESTROYED. GENERAL BOST ARY ERROR AND DATA ERROR SITS IN THE DSN ARE ON. LOOP THIS ROUTINE SO THES. OTHERS. OTHERS. MOTE- IF THE SECTOR ID IN CYLLINGER 2, SECTOR I IS DESTROYED IT WILL BE RESTORED BY THE ROUTINE. WRITE 32D MORDS OF HEXADECIMAL 1313 IN CYLINDER 2, SECTOR D. READ AND VERIFY CORRECT DATA. LOOP THIS POUTINE SD TIMES. WRITE 32D WORDS OF HEXADECIMAL ESES IN CY- LINDER 2D., SECTOR 6. READ AND VERIFY COR- RECT LATA. LOOP THIS ROUTINES D TIMES. S.2 DESCRIPTION OF SUB-ROUTINES ALL THE SUBROUTINES DESCRIBED PROVIDE ANY NECESSARY ERROR AND STATUS PRINTOUTS. PEFFERENCE SECTION 4.) ALL SUBROUTINES WHICH REQUIRE THE OPTION ARE PROVIDED WITH THE 'LICK CN ERROR OPTION. THIS COPTION WILL LOOP THE SUBROUTINE IN THE SMALLST POSSIBLE LOOP WHICH CAUSED THE OFTIGINAL ERROR. OUTCE AN ERROR OCCURS, AND THE CPTION IS SELECTED, THE ROUTINE WILL REMAIN IN THE LOOP AS LONG AS THE "LOCK ON ERROR" SUICH IS GON. WHETHER THE ERROR FICURES OR NOT. IF NO ERROR OCCURS THEN THE OPTION HAS NO EFFECT. CALL BSI 2 STMLS-TB THE ROUTINE WILL SAVE INDEX REGISTERS I AND 2, SET AN MLSCF UPON RETURN FROM THE MONITOR "THE SUBROUTINE WILL RESTORE INDEX REGISTERS I AND 2 AND BRANCH TO CALL+1. BSI 2 ZRQOY-TB THIS SUBROUTINE IS USED TO SET MLSCF ENTRIES WHEN EXITING TO THE MONITOR. THE ROUTINE WILL SAVE INDEX REGISTERS I SET FIRE DISK FRUM THE OIAG- NOSTIC MONITOR. THE ROUTINE WILL FIRST CHECK TO SEE IF THE DISK FRUM THE OIAG- NOSTIC MONITOR. THE ROUTINE WILL FIRST CHECK TO SEE IF THE DISK IS ALREADY REQUESTED. JE NOT, THEN A CALL IS MADE TO THE DIAGNOSTIC MONITOR ROUTINE, | 11 | | OF 1 AND DATA OF E5E5. READ THE SECTOR AND SEE THAT ALL WCRDS EXCEPT THE FIRST ARE | |
| NOTE- IF THE SECTOR TO IN CYLINDER 2, SECTOR 1 IS DESTROYED IT WILL BE RESTORED BY THE ROUTINE. 1 SO DESTROYED IT WILL BE RESTORED BY THE ROUTINE. 14 E MRITE 32D WORDS OF HEXADECIMAL 1313 IN CYLINDER 2, SECTOR D. READ AND VERIFY CORRECT DATA. LOOP THIS POUTINE 5D TIMES. 14 E MRITE 32D WORDS OF HEXADECIMAL ESES IN CYLINDER 207. SECTOR 6. READ AND VERIFY CORRECT CATA. RECT CATA. LOOP THIS ROUTINES. 5.2 DESCRIPTION OF SUB-ROUTINES ALL THE SUBROUTINES DESCRIBED PROVIDE ANY NECESSARY ERROR AND STATUS PRINTOUTS. (PEFERENCE SECTION 4.) ALL SUBRUUTINES WHICH REQUIRE THE OPTION ARE PROVIDED WITH THE 'LICK ON ERROR' OPTION. THIS CPTION WILL LOOP THE SUBROUTINE IN THE SHALLEST POSSIBLE LOOP MHICH CAUSED THE ORIGINAL ERROR. DICCE AN ERROR OCCURS, AND THE CPTION IS SELECTED, THE ROUTINE WILL REMAIN IN THE LOUP AS LONG AS THE 'LOCK ON ERROR' SWITCH IS ON, WHETHER THE ERROR PFCURS OR NOT. IF NO ERROR OCCURS THEN THE OPTION HAS NO EFFECT. CALL BSI 2 STMLS-TB THIS SUBROUTINE IS USED TO SET MLSCF ENTRIES WHEN EXITING TO THE MONITOR. THE ROUTINE WILL SAVE INDEX REGISTERS 1 AND 2, SET AN MLSCF ENTRY, AND EXIT TO THE MCHITOR 'START' ROUTINE. UPON RETURN FROM THE MCHITOR 'START' ROUTINE. BSI 2 ZRQOV-TB THIS ROUTINE IS USED TO REQUEST USE OF THE DISK FRUM THE DIAGNOSTIC MONITOR. THE ROUTINE WILL FIRST CHECK TO SEE IF THE DISK IS ALREADY IN REQUESTED. IF NOT, THEN A CALL IS MADE TO THE DIAGNOSTIC MONITOR ROUTINE, REQUESTED. | NOTE- IF THE SECTOR 10 IN CYLINDER 2, SECTOR 1 IS DESTROYED IT WILL BE RESTORED BY THE ROUTINE. 13 D MRITE 320 MORDS OF HEXADECIMAL 1313 IN CYLINDER 2, SECTOR D. READ AND VERIFY CORRECT DATA. LCDP THIS POUTINE 5D TIMES. 14 E MRITE 320 MORDS OF HEXADECIMAL ESES IN CYRECT CATA. LCDP THIS POUTINE 5D TIMES. 5.2 DESCRIPTION OF SUB-ROUTINES ALL THE SUBROUTINES DESCRIBED PROVIDE ANY NECESSARY ERROR AND STATUS PRINTOUTS. (PEFERENCE SECTION 4.) ALL SUBROUTINES WHICH REQUIRE THE OPTION ARE PROVIDED WITH THE 'L.XK CN ERROR' OPTION. THIS COTION WILL LOOP THE SUBROUTINE IN THE SMALLEST POSSIBLE LOOP WHICH CAUSED THE OPTIONARE ROOR. ONCE AN ERROR OCCURS, AND THE COTION IS SELECTED, THE ROUTINE WILL REMAIN IN THE LOUP AS LONG AS THE 'LOCK ON ERROR' SWITCH IS ON. WHETHER THE ERROR OFCURS CR NOT. IF NO ERROR OCCURS THEN THE OPTION HAS NO EFFECT. CALL BS1 2 STMLS-TB THIS SUBROUTINE IS USED TO SET MLSCF ENTRIES WHEN EXITING TO THE MONITOR. THE ROUTINE WILL SAVE INDEX REGISTERS 1 AND 2, SET AN MLSCF ENTRY, AND EXIT TO THE MCNITOR THE MODITOR. THE ROUTINE WILL SAVE INDEX REGISTERS 1 AND 2, SET AN MLSCF ENTRY, AND EXIT TO THE MCNITOR THE MUDITOR HE MUSTOR THE MILL RESTORE INDEX REGISTERS 1 AND 2 AND BRANCH TO CALL+1. BS1 2 ZRODY-TB THIS ROUTINE IS USED TO REQUEST USE OF THE DISK FRUM THE OTAGNOSTIC MONITOR. THE ROUTINE WILL FIRST CHECK TO SEE IF THE OTSK IS ALREADY REQUESTED. IF NOT, THEN A CALL IS MADE TO THE DIGNOSTIC MONITOR ROUTINE, REQUEST. | 12 | c | 400 AND DATA LF HEXADECIMAL 1313. READ SECTOR O AND DETERMINE HOW MANY WORDS WERE WRITTEN AND SAVE FOR THE SUMMARY. IF LESS THAN 331 OR MORE THAN 358 WORDS WERE WRITTEN, PRINT AN ERROR MESSAGE. CHECK THAT THE SECTOR ID IN CYLINDER 2, SECTOR I IS NOT DESTROYED. CHECK THAT BOTH ANY ERROR AND DATA ERROR | |
| 2. SECTOR D. READ AND VERIFY CORRECT DATA. LOOP THIS POUTINE SD TIMES. 14 | 2, SECTOR D. READ AND VERIFY CORRECT DATA. LODP THIS ROUTINE SD TIMES. 14 E WRITE 32D WORDS OF HEXADECIMAL ESES IN CYLINDER 2DT, SECTOR 6. READ AND VERIFY CORRECT CATA. LOOP THIS ROUTINE SD TIMES. 5.2 DESCRIPTION OF SUB-ROUTINES ALL THE SUBROUTINES DESCRIBED PROVIDE ANY NECESSARY ERROR AND STATUS PRINTOUTS. (PEFERENCE SECTION 4.) ALL SUBROUTINES WHICH REQUIRE THE OPTION ARE PROVIDED WITH THE "L.CK ON ERROR" OPTION. THIS OPTION WILL LOOP THE SUBROUTINE IN THE SMALLEST POSSIBLE LOOP WHICH CAUSED THE ODIGINAL ERROR. OUNCE AN ERROR OCCURS, AND THE CPTION IS SELECTED. THE ROUTINE WILL REMAIN IN THE LOUP AS LONG AS THE "LOOK ON ERROR" SWITCH IS ON. MHETHER THE ERROR PICURES OR NOT. IF NO ERROR OCCURS THEN THE OPTION HAS NO EFFECT. CALL BS1 2 STMLS—TB THIS SUBROUTINE IS USED TO SET MLSCF ENTRIES WHEN EXITING TO THE MONITOR. THE ROUTINE WILL SAVE INDEX REGISTERS 1 AND 2, SET AN MLSCF ENTRY, AND EXIT TO THE MCHITOR "START' ROUTINE WILL RESTORE INDEX REGISTERS 1 AND 2 AND BRANCH TO CALL+1. BS1 2 ZRQOY—TB THIS ROUTINE IS USED TO REQUEST USE OF THE DISK FRUM THE DIAGNOSTIC MONITOR. THE ROUTINE WILL FIRST CHECK TO SEE IF THE DISK IS ALREADY REQUESTED. IF NOT, THEN A CALL IS MADE TO THE DISK ONLINE ROUTINE, REGOV, AND UPON REXIDER EXTILS TO CALL+1. | • | | NOTE- IF THE SECTOR TO IN CYLINDER 2, SECTOR 1 IS DESTROYED IT WILL BE RESTORED BY THE | |
| LINDER 2D7, SECTOR 6. READ AND VERIFY CORRECT CATA. BECT CATA. LEOP THIS ROUTINES. 5.2 DESCRIPTION OF SUB-ROUTINES ALL THE SUBROUTINES DESCRIBED PROVIDE ANY NECESSARY ERROR AND STATUS PRINTOUTS. (PEFERENCE SECTION 4.) ALL SUBROUTINES WHICH REQUIRE THE OPTION ARE PROVIDED WITH THE "LINK ON ERROR" OPTION. THIS OPTION HILL LOOP THE SUBROUTINE IN THE SMALLEST POSSIBLE LOOP WHICH CAUSED THE OPTIONLE ERROR. ONCE AN ERROR OCCURS, AND THE CPTION IS SELECTED, THE ROUTINE WILL REMAIN IN THE LOUP AS LONG AS THE "LOCK ON ERROR" SWITCH IS ON, WHETHER THE ERROR PFCURRS OR NOT. IF NO ERROR OCCURS THEN THE OPTION HAS NO EFFECT. CALL BSI 2 STMLS-TB THIS SUBROUTINE IS USED TO SET MLSCF ENTRIES WHEN EXITING TO THE MONITOR. THE ROUTINE WILL SAVE INDEX REGISTERS 1 AND 2, SET AN MLSCF ENTRY, AND EXIT TO THE MONITOR "START" ROUTINE. UPON RETURN FROM THE MONITOR THE SUBROUTINE WILL RESTORE INDEX REGISTERS 1 AND 2 AND BRANCH TO CALL+1. BSI 2 ZRQOV-TB THIS ROUTINE IS USED TO REQUEST USE OF THE DISK FRUM THE DIAGNOSTIC MONITOR. THE ROUTINE WILL FIRST CHECK TO SEE IF THE DISK IS ALREADY REQUESTED. IF NOT, THEN A CALL IS MADE TO THE DIAGNOSTIC MONITOR ROUTINE, REQUESTED. | LINDER 207, SECTOR 6. READ AND VERIFY CORRECT CATA. BECT CATA. LEOP THIS ROUTINES. 5.2 DESCRIPTION OF SUB-ROUTINES ALL THE SUBROUTINES DESCRIBED PROVIDE ANY NECESSARY ERROR AND STATUS PRINTOUTS. (PEFERENCE SECTION 4.) ALL SUBROUTINES WHICH REQUIRE THE OPTION ARE PROVIDED WITH THE "LINK ON ERROR" OPTION. THIS OPTION WILL LOOP THE SUBROUTINE IN THE SMALLEST POSSIBLE LOOP WHICH CAUSED THE OPTION ARE RROR. ONCE AN ERROR OCCURS, AND THE CPTION IS SELECTED. THE ROUTINE WILL REMAIN IN THE LOUP AS LONG AS THE "LOCK ON ERROR" SWITCH IS ON, WHETHER THE ERROR PFCURRS OR NOT. IF NO ERROR OCCURS THEN THE OPTION HAS NO EFFECT. CALL BSI 2 STMLS-TB THIS SUBROUTINE IS USED TO SET MLSCF ENTRIES WHEN EXITING TO THE MONITOR. THE ROUTINE WILL SAVE INDEX REGISTERS 1 AND 2, SET AN MLSCF ENTRY, AND EXIT TO THE MONITOR 'START' ROUTINE. UPON RETURN FROM THE MONITOR THE SUBROUTINE WILL RESTORE INDEX REGISTERS 1 AND 2 AND BRANCH TO CALL+1. BSI 2 ZRQOV-TB THIS ROUTINE IS USED TO REQUEST USE OF THE DISK FRUM THE DIAGNOSTIC MONITOR. THE ROUTINE WILL FIRST CHECK TO SEE IF THE DISK IS ALREADY REQUESTED. IF NOT, THEN A CALL IS MADE TO THE DIAGNOSTIC MONITOR ROUTINE, REQUY, AND UPON RETURN EXIT IS TO CALL+1. | 13 | D | 2, SECTOR D. READ AND VERIFY CORRECT DATA. | |
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| NOSTIC MONITOR. THE ROUTINE WILL FIRST CHECK TO SEE IF THE DISK IS ALREADY REQUESTED. IF NOT, THEN A CALL IS MADE TO THE DIAGNOSTIC MONITOR ROUTINE, REQDY, AND UPON RETURN EXIT IS TO CALL+1. | NOSTIC MONITOR. THE ROUTINE WILL FIRST CHECK TO SEE IF THE DISK IS ALREADY REQUESTED. IF NOT, THEN A CALL IS MADE TO THE DIAGNOSTIC MONITOR ROUTINE, REQDY, AND UPON RETURN EXIT IS TO CALL+1. | 128 | 2 ZRQDV-TB | | |
| REQDV, AND UPCH RETURN EXIT IS TO CALL+1. | REQDV, AND UPCH RETURN EXIT IS TO CALL+1. | | THE ROUTINE | | |
| | | | IF NOT, THEN DV, AND UPCN RE | ETURN EXIT IS TO CALL+1. | |
| | | | | | |

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18M MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 18DD SYSTEM

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181D A/B FUNCTION TEST

BSI 2 XEQ-TB

THIS SUBROUTINE BUILDS AND EXECUTES AN XIO INSTRUCTION. THE ROUTINE THEN LOOPS THRU THE DIAGNOSTIC MONITOR WAITING FOR AN INTER-RUPT.

IF THE INTERRUPT DOES ACT CCCUR WITHIN A SPECIFIC NUMBER OF LOOPS, THE MESSAGE ID FOR LOST INTERRUPT IS PRINTED AND THE FUNCTION TEST IS TERMINATED.

IF THE INTERRUPT CCCURS IN TIME THE ROUTINE EXITS DIRECTLY TO CALL+1 WITH THE DSW SENSED AT INTERRUPT STORED IN LOCATIONS ZSNS AND TBDSW.

BSI 2 ZRLDV-TB

THIS ROUTINE IS USED TO RELEASE THE DISK TO THE MONITOR. THE ROUTINE FIRST CHECKS TO SEE IF THE DISK IS ALREADY RELEASED. IF NOT. THE ROUTINE CALLS THE DIAGNOSTIC MONITOR ROUTINE, RELDY. UPON RETURN FROM THE MONITOR THE ROUTINE EXITS TO CALL+1. IF THE DISK IS ALREADY RELEASED, THE ROUTINE MERELY EXITS TO CALL+1.

BSI 2 CK: K-T8
DC RETURN 1

THIS SUBROUTIVE IS USED TO CHECK FOR THE LOCK ON ERROR OPTION SELECTED. IF THE SWITCH IS ON THE ROUTINE RETURNS INDIRECTLY VIA THE ADDRESS RETURNI IN CALL+1. IF THE SWITCH IS OFF THE ROUTINE RETURNS DIRECTLY TO CALL+2.

BSI 2 SETV-TB
(A REGISTEP CONTAINS DATA TO SET)

THIS SUBROUTINE SETS THE I/O AREA TO THE CONTENTS OF THE A REGISTER. THE NUMBER OF WORDS TO BE SET MUST BE STORED IN LOCATION COMA PRICE TO THE CALL.

BSI 2 RNDCM-TB (A REGISTER MUST CONTAIN A NUMBER)

THIS ROUTINE USES THE NUMBER IN THE A REGISTER TO GENERATE A RANDOM NUMBER, AND RETURNS TO CALL+1 WITH THE NEW NUMBER IN THE A REGISTER. THE NUMBER IN THE A REGISTER AT THE TIME OF THE CALL IS NORMALLY THE LAST RANDOM NUMBER USED.

BSI 2 STMSG-TB DC FMMM

F= FORM NUMBER MMM= MESSAGE ID.

NOTE IF BIT ZERO OF THE CALL EQUALS 1
THIS MESSAGE IS PRINTED AS AN ACDITIONAL
LINE MESSAGE AND PID-MID-RID-RAD WILL
NOT APPEAR IN THE LINE OF PRINT.

THIS ROUTING WILL SET UP THE MESSAGE SPECIFIED BY THE FORM NUMBER. THE MESSAGE ID IS THEN CHECKED TO SEE IF HEX CHARACTER CNE IS AN E. IF IT IS AN E THE DIAGNOSTIC MONITOR ERROR ROUTINE IS CALLED. OTHERWISE THE LOG ROUTINE IS CALLED, UNLESS THE BYPASS LOG MESSAGES OPTION IS SELECTED. IF THE CALL WAS TO THE ERROR ROUTINE THE DIAGNOSTIC MONITOR OPTION OF LODP ON ERROR IS CHECKED AND IF SELECTED THE TEST ROUTINE CAUSING THE ERROR WILL BE LUOPED. THIS ROUTINE NORMALLY EXITS TO CALL+2.

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IBK MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 180D SYSTEM 1810 A/B FUNCTION TEST VERFY-TB CYL.NO.DESIRED ERROR RETURN THIS ROUTINE WILL SEEK THE DESIRED CYLINDER BY CALL-ING ROUTINE SEEK. UPON RETURN FROM THE SEEK ROUTINE, THIS ROUTINE WILL READ SECTOR ID'S. IF AL. SECTOR IDS ARE FROM THE SAME CYLINDER AND THE SECTOR ADDRESSES ARE SEQUENTIAL THE ROUTINE THEN CHECKS FOR DESIRED CYLINDER. IF THIS IS THE DESIRED CYLINDER THE ROUTINE EXITS TO CALL+3. IF ALL ID'S ARE NOT FROM THE SAME CYLINDER, CR SECTOR ADDRESSES 0 ARE NOT SEQUENTIAL, THE ROUTINE ENTERS A RETRY PROCEDURE. IF THE COUTINE CANNOT VERIFY THE CYLINDER REACHED ON ALL OF EIGHT TRIES 0 THE FUNCTION TEST IS TERMINATED. (UNLESS THE LOCK ON ERROR OPTION IS SELECTED.) Ω (A REGISTER MUST CONTAIN THE DESIRED CYLINDER NUMBER, RIGHT JUSTIFIED) 0 THIS SUBROUTINE BUILDS THE CORRECT TOCC WORDS FOR THE DISK TYPE (1810 A OR B) BEING RUN, AND ISSUES THE COMMAND, THRU THE 0 XEQ SUBRCUTINE. IF DSW ERRORS ARE FOUND AFTER THE INTERRUPT. UP TO SEVEN RETRIES 0 IF THE DISK IS A 18108 AND ALL EIGHT TRIES RESULTED IN SEEK INCOMPLETE DSW ERROR, THE FUNCTION TEST WILL BE TERMINATED. IF THE ERRORS WERE NOT SEEK INCOMPLETE, BUT DID PERSIST THROUGH 0 ALL 8 TRIES THE ROUTINE EXITS BACK TO VERIFY ROUTINE TO AN ERROR RETURN. IF ANY TRY RESULTED IN NO DSW ERRORS THEN THE ROUTINE EXIT IS NORMAL. **2** \$ 1 2 READ-TB WORD COUNT NUMBER (USED IN CALL TO CMP ROUTINE) ERROR RETURN 1 (A REG. CONTAINS SECTOR DESIRED.) THIS ROUTINE WILL BUILD THE READ LOCC. PRESET THE I/O AREA TO FFFF, SET THE WORD COUNT INTO THE I/O AREA AND ISSUE THE READ COMMAND 0 THRU SUBROUTINE XEQ. UPON RETURN FROM XEC THE DSW IS CHECKED FOR ANY READ EXRORS. WITH OR WITHOUT DSW ERRORS THIS ROUTINE WILL THEN CALL THE CMP SUBROUTINE, TO CHECK DATA READ. IF ALL EIGHT TRYS FAIL THEN THE ROUTINE EXIT WOULD BE INDIRECT-LY ON FRROR RETURN 1. IF ANY READ TRY WAS SUCCESSFUL THE RETURN IS TO CALL+4. MDX ERROR RETURN THIS ROUTINE WILL MAKE A WORD BY WORD COMPARISON OF THE DATA READ AGAINST THE DATA EXPECTED. THE ROUTINE WILL ALSO MAKE A CHECK OF THE WORD CCUNTER BY COMPARING TO SEE IF MORE WORDS WERE TRANS-FERRED THAN EXPECTED. 0 IF NO ERRORS ARE FOUND THE ROUTINE EXITS DIRECTLY TO CALL+2, OTHERWISE THE EXIT IS TO CALL+1.

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PART NO. 2196380

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IBM MAINTENANCE GIAGNESTIC PROGRAM FOR THE 1800 SYSTEM PART ND. 2196380 PAGE 10 1810 A/B FUNCTION TEST NUMBER CF WORDS (IF BIT 0 = 1, DO NOT PRESET I/O AREA)
DATA TO 8E PRESET IN I/O AREA ERROR RETURN (A REG. CONTAINS THE SECTOR NUMBER) THIS ROUTINE WILL PRESET THE I/C AREA WITH DATA TO BE THIS ROUTINE WILL PRESET THE I/C AREA WITH DATA TO BE WRITTEN. THE ROUTINE WILL THEN PLACE THE SECTOR ID AT I/O AREA PLUS I AND MORD COUNT AT I/O AREA. THE ROUTINE WILL BUILD THE IOCC AND ISSUE THE WRITE COMMAND, THRU THE XEQ ROUTINE.

UPON RETURN FROM XEQ THE DSW IS CHECKED FOR ERRORS.

IF ANY ERRORS EXIST THE ROUTINE WILL RETRY (2 TO A MAXIMUM OF TIMES 7 TIMES. · IF ALL B WRITE TRIES FAIL THE ROUTINE WILL EXIT INDIRECTLY TO ERROR RETURN ADDRESS. IF ANY WRITE TRY IS SUCCESSFUL THE ROUTINE WILL EXIT DIRECT-LY TO CALL+4. LAST PAGE ---

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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 1810 FUNCTION TEST

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APPENDIX

6.1 EDIT PROCEDURE

> THE FOLLOWING EDIT PROCEDURE IS FOR CARD INPUT. THE EDIT PROCEDURE FOR PAPER TAPE INPUT IS LOCATED IN THE PAPER TAPE EDIT UTILITY PROGRA: DCCUMENTATION. THE PROPER EDIT CARDS MUST BE THE LAST CARDS IN THIS PROGRAM DECK. THE FOLLOWING FORMS ARE PROVIDED TO AID IN MANUALLY PREPARING THESE EDIT CARDS OR UPDATING EXISTING EDIT CARDS. IF IT IS MECESSARY TO PREPARE OR MODIFY EDIT CARDS, FILL IN THE NECESSARY DATA IN THE FORMS PRIOR TO PUNCHING THE CARDS. CARD COLUMNS THAT ARE SHADED SHOULD BE LEFT BLANK.

DDEF STANDS FOR DEVICE DEFINITION EDIT FIELD. IT INCLUDES:

1. THE INTERRUPT LEVEL ASSOCIATED WITH THIS DEVICE (USE HEX NOTATION, 00-17).
2. THE ILSW BIT POSITION ASSOCIATED WITH THIS DEVICE (USE HEX NOTATION, 0-F).
3. THE CHANNEL ASSIGNED TO THIS DEVICE (U.8). IF THIS IS A DPC DEVICE, PUNCH AN FIN THE CARD COLUMN.

THE LAST EDIT CARD IS THE "END EDIT CARD". THE INFORMATION IN THIS CARD INCLUDES: 1. AN"E"IN COLUMN 1. 2, THE PID FOR THIS PROGRAM (COL 2-3). 3. A TERMINATOR WORD OF FFFF (COL 7-10).

| | | | | | | | | | | | | VE 1 DEF | | | VE DEF | 2 | Di | R I VI | E_3 | | | | | | | | | | | ALTE | ERNA | TE FI | LE / | ADDRI | SSES | 5 | | | | | | | | |] | | | |
|--------|---|------------|---------|---|-----|---------------|----|---------------------------|--------|------|-----------|-------------|----------------|-----------|-----------|-----|------------|--------|----------------|-----|------------------------|-----|--------|---------|------------------------|---------|----|------------------------|--------|------|-----------------------|-----------|------|------------------------|------|----|------------------------|------|----------|------------------------|-----------|----|--|-------|---------|---|-----------|--|
| | - | | | | | | | | | _ | | RY 1 | | | RY | 2 | E | NTR | | | EN | TRY | 4 | | ENTR | Y 5 | | ENTF | RY 6 | | ENT | RY 7 | | ENT | RY 8 | | EH. | RY 9 | | ENTR | ₹Y A | | EN. | TRY 8 | 3 | | | |
| | | PROGRAM ID | | | | CARD SEQUENCE | | NUMBER OF EDIT ENTRIES | | | INTERRUPT | LEVEL (HEX) | CHANNEL (OR F) | INTERRUPT | ᅴ | اڄا | TATERBUIDT | さき | ILSW BIT (HEX) | _ _ | ADDRESS PEFERENCE 1 | ` / | % 0000 | Annress | ADDRESS REFERENCE 2 | ** 0008 | | ADDRESS RFFFRENCE 3 | | | ADURESS BEERENCE A | 0018 | - 1 | ADDRESS RFFFRENCE 5 | | 1 | ADDRESS REFERENCE 6 | | | ADDRESS REFERENCE 7 | | | ADDRESS REEZBENCE 8 | 4 _ | WW 0050 | | | |
| COLUM | 1 | 2 3 | 4 9 | 6 | 7 8 | 9 10 | 11 | 12 13 | 3 14 1 | 5 16 | 17 | 8 19 | 20 2 | | \perp | | 26 | | | 31 | П | | | 36 | \square | | 41 | | \Box | 46 | | \square | 51 | | П | 56 | | | 61 | | \prod | 66 | <u>, </u> | | 71 | | Π | |
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CARD O CONTAINS THE DDEF'S FOR THE 1810 FILES. REFER TO NOTE AT BOTTOM OF PAGE.

CARD END IS THE "END EDIT CARD". PUNCH EXACTLY AS IS SHOWN.

** ADDRESSES NORMALLY USED. THESE ADDRESSES NEED NOT BE PUNCHED UNLESS AN ADDRESS IS BEING CHANGED. THEN, ALL ADDRESSES TO THE LEFT OF SAID CHANGE MUST BE PUNCHED. AND THE TOTAL NUMBER OF ALL ENTRIES INDICATED (COL. 15). SEE SEC. 2.2.1.B

IF SYSTEM HAS AT OR AZ FILE. THE UNUSED DRIVE FIELDS MUST BE PUNCHED OOOD WHENEVER AN ADDRESS REFERENCE FIELD IS PUNCHED. (OTHERWISE LEAVE UNUSED DRIVE FIELDS BLANK.) SEE SEC. 2.2.1.B

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PROG 15 0809- * PAGE 11

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2310 A/B FUNCTION TEST

PAGE

PART NO. 2196378

80900030 THIS PROGRAM USES A NEW CODING 80900040 CALLED EXTENDED MNEMONIC 80900050 CODING. 80900060 80900070 THIS CODING IS SUMMARIZED HERE 80900080 FOR CONVENIENCE. 80900090 80900100 80900120 * EXTENDED STANDARD MEANING 80900130 * MNEMONIC MNEMONIC OF CODE 80900140 * COOING EQUIVALENT 80900150 -80900160 * SKP £ BSC & SKIP IF A IS 80900170 PLUS. 80900180 -80900190 * SKP -3 BSC &-SKIP IS A IS 80900200 PLUS OR MINUS. 80900210 --80900220 * SKP Z BSC Z SKIP IF A IS 80900230 ZERO. 80900240 -----80900250 * SKP 0 BSC 0 SKIP IF OVERFLOW 80900260 IS OFF. 80900270 -80900280 * SKP C BSC . C SKIP IF CARRY IS 80900290 -B0900310 * SKP 3-3 BSC 3-3 SKIP IF A IS 80900320 PLUS OR MINUS OR 80900330 IF CARRY IS OFF. 80900340 -----80900350 EXIT MDX EXIT BRANCH TO EXIT 80900360 WHERE EXIT IS 80900370 WITHIN NORMAL 80900380 DISPLACEMENT. 80900390 -80900400 L ALPH BSC L ALPH BRANCH TO ALPH. 80900410 -----80900420 * BZ BETA BSC L BETA,&-BRANCH TO BETA 80900430 IF A IS ZERO. 80900440 -80900450 * BNZ BETA BSC L BETA,Z BRANCH TO BETA 80900460 IF A IS NON-ZERO 80900470 -80900480 * BNZ I BETA BSC I BETA, Z BRANCH 80900490 INDIRECTLY TO 80900500 BETA IF A IS 80900510 NON-ZERO. 80900520 -80900530 RTNA BSC L RTNA, Z& BRANCH TO RTNA 80900540 IF A IS MINUS. 80900550 -80900560 BNN RTNB BRANCH TO RTNB BSC L RTNB,-80900570 IF A IS 80900580 NOT MINUS. 80900590 -80900600 SUBO BSC L SUBO, Z- BRANCH TO SUBO 80900610 IF A IS PLUS. 80900620 -80900630 * BNP SUB BSC L SUB, & BRANCH TO SUB 80900640 IF A IS NOT 80900650 PLUS. B0900660 --80900670 **ENT**R BSC L ENTR.C. BRANCH TO ENTR 80900680

ÎBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2310 A/B FUNCTION TEST

PART NO. 219637B PAGE 1 A

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| IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM | PART NO. 2196378 | IBM MAINTENANCE DIAGNOSTIC F | PROGRAM FOR THE 1000 | | A | |
| 2310 A/R SUNCTION TEST | DACE 2190370 | | WOOKAM FOR THE 1800 | SYSTEM | P | DAGT NO |

2310 A/B FUNCTION TEST PAGE PART NO. 2196378 2 2310 A/B FUNCTION TEST PAGE S = SECTOR (0-3)80901390 MDNITOR INTERFACE TABLES 80901400 80902150 SETV 07FF 0 0900 80901410 PID 80902160 DC /0900 A REG.=NO.TO BE SET IN COMA AREA 1810 A/B DFT 0800 0 0000 80901420 RID DC 02170 COMA = WDRD COUNT ROUTINE ID 0801 0 0000 80901430 RAD DC 80902180 BSI 2 SETV-TB PRESET COMA+1 TO COMA+N+2 80901440 0802 0 0000 ROUTINE ADRS SWO 80902190 DC SWITCH FUNCTION 00 TO VALUE IN A REG. 0803 0 0000 80901450 SW1 DC 80902200 SWITCH FUNCTION 01 0804 0 0000 SW2 80901460 DC. 80902210 SWITCH FUNCTION 10 STMLS 0805 D 0000 80901470 SW3 DC 80902220 BSI 2 STMLS-TB SWITCH FUNCTION 11 SAVE IX 1, IX 2 AND EXIT 0806 1 0A38 80901480 IPA 80902230 DC ZIPA INITIAL IZATION ADRS * MONITOR. RETURN IS TO 0807 1 0A6D 80901490 LPA 80902240 DÇ ZIPA LDDP PRDGRAM ADDRESS 0808 1 0A7B * CALL+1. EPA 80901500 OC. 80902250 END PROGRAM ADDRESS 80902260 80901510 STMSG 0809 0 0000 MLSCF DC 80902270 8090152D n 2 STMSG-TB PRINT MESSAGE MAIN LINE SEQUENCE BSI 0000 0 A080 80901530 DC 80902280 0 * CONTRDL FIELD DSW ERRORS. 080B 0 FFFF TERM 80902290 80901540 DC /FFFF DC TERMINATOR MESSAGE ID 080C 1 OFFF 80901550 DC 80902300 PEND LAST PROGRAM ADDRESS 0800 0 0000 80901560 80902310 DC WDRDS FDR MDNITOR VEREY 080E 0 0000 80902320 80901610 0 2 VERFY-TB SEEK A CYLINDER AND VER-BSI * USE 080F 0 0000 80901620 DC 80902330 * IFY CYL. BY READING AT 0810 0 0000 80901630 ONLIN DC 80902340 NDN-ZERD MEANS DN-LINE * LEAST TWO SECTOR ID'S. 0811 0 0002 80901640 CDMPT DC 80902350 COMPATIBILITY SWITCH CYL # DESIRED 80901650 02360 RETURN ADRS IF CYL # INVALID OR 80901660 80902370 EDIT FIELD BAD FRDM 2315 DISK INITIALIZER. 80901670 80902380 0812 0 FFFF 80901680 DDEF DC 80902390 /FFFF DDEF ENTRY ONE WRITE 0813 0 FFFF 80901690 80902400 DC A REG.=SECTOR COUNT /FFFF ENTRY TWO 0814 0 FFFF 80901700 8090241D DC /FFFF 2 WRITE-TB WRITE IN PRESENT CYLINDER 0815 0 0000 ENTRY THREE CYOOO DC 80901710 80902420 ND.DF WORDS TO BE WRITTEN /0000 CYL 0 0816 0 0008 80901720 CY001 DC 80902430 /0008 0817 0 0010 CYL 1 IF BIT 0=1, DDNT PRESET 80901730 CYOO2 DC 80902440 /0010 CYL 2 THE I/O AREA 0818 0 0018 80901740 CY003 DC 80902450 /0018 IF BIT 1=1 DON'T CHECK DSW 0819 0 0638 CYL 3 01741 CY199 DC 80902460 /0638 FDR ERRDRS AFTER THE WRITE CYL 199 081A 0 0640 CY200 DC 80902470 /0640 DATA TO BE WRITTEN CYL 20D 081B 0 0648 80901750 CY201 DC 80902480 /0648 DC ADRS DF DSW ERROR RETURN 081C 0 0650 CYL 201 80901760 CY2D2 DC 80902490 /0650 CYL 202 081D 0 0000 80901770 RNDSK DC 80902500 PATCH OPTION-RANDOM SEEK 081E 0 0000 RNDWR DC 80901830 80902510 081F 0 FFFF PATCH OPTION RANDOM WRT 2 XEQ-TB EXECUTE I/O AND WAIT BADCY DC 80901840 80902520 * FOR INTERRUPT 0820 0 FFFF 80901850 DC 80902530 D821 D FFFF 80901860 80902540 DÇ ZRLDV 80901880 80902550 2 ZRLDV-TB RELEASE DEVICE 80902560 80901890 BEGIN ROUTINE 80901900 80902570 0822 2 4480 012C ZRODV BEG BSI I BEGIN 80902580 80901910 EXIT TO MONITOR BSI 2 ZRQDV-TB REQUEST DEVICE 0824 1 07FF 80902590 80901920 PID ADRS DF PID 80901930 80901940 80902620 INTERRUPT ROUTINE 80901960 80902630 MONITOR INTERFACE 80901970 0825 0 0000 80901980 INTERRUPT SWITCH 0826 0 0000 80902660 DVA DC AREA CDDE STORAGE 0827 0 0000 INTR 80902670 80902000 DC 0 07FF INTRPT ENTRY ORG *+2047 0828 0 COFC 80902680 80902010 LO INTSW 0829 1 6700 0833 GET INTRPT SWITCH 80902690 80902020 LDX L3 INTRB SET RETURN IN CASE **EQUATE TABLES** 082B 0 4818 80902030 80902700 SKP SKIP IF EXPECT INTERRUPT 082C 0 6BDC 80902710 80902040 STX 3 MLSCF 0120 0 ELSE SET IN RETURN ADDRESS 80902720 BEGIN EQU 300 0820 0 1010 80902050 012D 0 16 START EQU CLEAR INTERRUPT SWITCH BEGIN+1 082E 0 D0F6 INTSW 8090206D 80902730 012E 0 END EQU START+1 80902070 80902740 012F 0 082F 0 0816 LOG -EQU END+1 80902080 XIO 80902750 0130 0 ZSNS SENSE DSW ERROR EQU 0830 0 D015 LOG+1 80902090 STO 80902760 ZSNS 0131 0 STORE DSW IN TEMP LOCIN REQDY EOU 0831 1 4080 0827 FRROR+1 80902770 80902100 BSC I INTR 0132 0 EXIT ROUTINE RELDV EOU REQDV+1 80902780 80902110 0133 0 CRCK EQU RELDV+1 80902790 80902120 PRINT ERROR - MAINLINE 0134 0 MATD EQU CRCK+1 8090280D 80902130 0833 0 CO12 INTRB LD 80902140 80902810 GET INTRPT DSW 80902820 DATE 04NOV66 010CT67 15FEB68 ATE 04NDV66 010CT67 020EC68 14NOV69 30JAN70 20MAR 70 PROG ID 15FEB68 EC ND. 0809-2 02DEC68 14NDV69 30JAN70 415233 411875 411913 411961 C NO. 20MAR70 415233 431319 431319A PROG ID 431320 411875 PAGE -411913 411961 0809-2 431319 431319A

| MAINTENANCE DIAGNDSTIC F A/B FUNCTION TEST | PROGRAM FDR [™] T | HE 1800 SYST | EM | PART ND. 21963 PAGE | | | PRDGRAM FOR TH | E 1800 SYST | EM | PART NO PAGE | • 21 |
|---|--|---------------------|--|--------------------------------|------------------|-----------------------------------|-----------------------|---------------------|--|---------------------------------------|----------------------------|
| 0834 0 D01B | STD | TBDSW | STORE FOR PRINT | 80902830 | | 0 0000 | HRDSK DC | *-* | NUMBER HARD SK ERRORS | 80903490 | |
| 0835 1 6600 087F 0837 0 4230 | LDX BS I | L2 TB 2 STMSG-TB | SET PDINTER TO TABLE PRINT ERROR MESSAGE | 80902840 8090285 0 | | 0 000 0 0 00 0 0 | RDCNT DC SFTRD DC | *-* *-* | NUMBER OF READS NUMBER SDFT RD ERRORS | 80903500 | |
| 0838 0 0E02 | DC | /0E02 | MESSAGE IO | 80902860 | 2 | 0 0000 | HRDRD DC | *-* | NUMBER HARD RD ERRORS | 80903510 80903520 | |
| 0839 2 4C80 012D | #BSC | I START | BRANCH TO MONITOR | 80902870 | | 0 0000 0 0000 | WRCNT DC Setwr DC | *-* *-* | NUMBER OF WRITES NUMBER SOFT WR ERRORS | 80903530 | |
| | * | | | - 80902890 | 2 | 0 0000 0 0000 | HRDWR DC | *-* | NUMBER HARD WR ERRDRS | 80903540 80903550 | |
| | * | | 00000000000000000000000000000 | ¤ 80902900 80902910 | 0000 | | WRLNG DC Smlng equ | *-* *-SUMRY | AVG SECT LNGTH/WRT 400 LENGTH DF SUMMARY TABLE | 80903560 80903570 | |
| | * | TABLE | E OF COMMON PROGRAM TANTS | 80902920 | | 0 0000 0 0000 | FRNSK DC | *-* | FIRST RANDOM SK ISSUED | 80903580 | |
| | * | | | 80902930 80902940 | 0878 | 0000 | PRNSK DC FRN1 DC | *-* *-* | LAST RANDOM SK ISSUED(FXD) FIRST RANDOM # RTN 9 | 80903590 80903600 | |
| 087F 2 | *DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD | PID+128 | PDINTER USED TO REACH | ¤ 80902950 | | 0000 | LRN1 DC FRN2 DC | *-* *-* | LAST RANDOM # RTN 9(FXD) | 80903610 | |
| | * | F10+120 | * TABLE BY SHORT FORM | 02951 | | 0000 | LRN2 DC | *-* | FIRST RANDOM # RTN 10 LAST RANDOM # RTN 10(FXD) | 80903620 80903630 | |
| 083B 0 0000 083C 0 0404 | DDEFX DC XSKBK DC | *-* /0404 | DDEF SELECTED BY SW FNC 2 FNC/MOD-SEEK OUT | | | 0000 | CNTA DC RNDCK DC | *-* *-* | SEEK RTN-RETRY CTR | 80903640 | |
| 083D 0 3000 | H3000 DC | /3000 | FORM NUMBER FOR PRSUM. | 80902970 80902980 | 087E (| 0000 | NOCK OC | ∓ − ∓ | TEMP STORAGE BYPASS RD CKS IF NON O | 80903650 80903660 | |
| 083E 0 1313 083F 0 0123 | H1313 DC MASK DC | /1313 /0123 | CONSTANT HEX 1313 ORDER OF SECTOR COUNTS | 80902990 | 087F (0880 (| | LNGTH DC | *-* *-* | RECORD LENGTH STORAGE | 80903670 | |
| 0840 0 0103 | K259 DC | 259 | RANDOM GENER. MULTIPLIER | 80903000 80903010 | 0881 | 0000 | ERCT DC | *-* | INDEX POINTER CMP RTN ERROR CTR | 80903680 80903690 | |
| 0841 0 0500 0842 0 0600 | WRMDD DC DSKMD DC | /0500 /0600 | WRITE FUNCTION READ FNC/MOD | 80903020 80903030 | 0882 (0883 (| | DC S#B DC | *-* *-* | TEMP STORAGE-CMP RTN EVEN | 80903700 | |
| 0843 0 0680 0844 0 0700 | RDCHK DC SNRES DC | /0680 | READ-CHECK IOCC | 80903040 | 0884 (| | DC | *-* | *. | 80903710 80903720 | |
| 0845 0 0080 | H0080 DC | /0700 /0080 | SENSE/RESET CONSTANT MASK USED BY STMSG RTN | 80903050 03060 | 0885 (0886 (| | IDS#B DC LPRNT DC | *-* *-* | PRESENT SECT/CYL ID ODD LAST WORD PRINTED | 80903730 80903740 | |
| 0846 0000 0846 0 0000 | BSS ZSNS OC | E 0 *-* | | 80903070 | 0887 (0888 (| | ZCNT DC | *-* | DELAY COUNT . | 80903750 | |
| 0847 0 0000 | DC | *-* | | N 80903080 80903090 | 0889 | | RTCNT DC WRRTY DC | *-* *-* | RETRY COUNTER RETRY COUNTER | 80903760 80903770 | |
| 0848 0 0000 0849 0 0009 | ZXID DC OC | *-* *-* | COMMON IDCC STORAGE EVEN | N 80903100 | 088A 0 | | WRERR DC | ** | ERROR SWITCH | 80903780 | |
| 084A 0 0000 | SNXIO DC | *-* | | 80903110 N 80903120 | 0880 | 0000 | RTNER DC CMPTM DC | *-* *-* | RTN ERRDR COUNTER TEMP STORAGE | 80903790 80903800 | |
| 084B 0 0000 084C 0 E5E5 | DC HE5E5 OC | *-* /E5E5 | | 80903130 | 088D 0 | | MODEL DC HOOAO DC | *-* | NDN ZERO FOR FAST ACCESS | 03810 | |
| 084D 0 0000 | MS GO DC | *-* | | 80903140 80903150 | 088F 0 | 00B0 | HOORO DC | /00A0 /00B0 | MODEL A MODEL B -FAST ACCESS | 80903820 03830 | |
| 084E 0 0000 084F 0 0000 | DC MSGID DC | *-* *-* | HEX/DEC FLAG . EVEN | N 03160 | 0890 0 0891 0 | | TEN DC HUNDR DC | 10 100 | CONSTANTS USED TO CONVERT | 05050 | |
| 0850 0 0000 | TBDSW DC | *-* | DSW EVEN | 80903170 80903180 | 0892 0 | - | THOUS DC | 1000 | * HEX TO DECIMAL * * | | |
| 0851 0 0000 0852 0 0000 | FILE# DC MOD3 DC | *-* *-* | FILE NUMBER ODD MDOIFIERS EVEN | 8090 3190 N 80903200 | 0893 1 | 0814 | * ADDEF DC | DDEF+2 | USED TO CREATE DEVICE DOES | 80903840 | |
| 0853 0 0000 0854 0 0000 | MOD4 DC | *-* | * 000 | 80903210 | 0894 1 0895 0 | 08C4 | ADCMA DC | COMA | USED TO CREATE DEVICE DDEF ADRS OF COMA | 80903850 | |
| 0855 0 0000 | MOD5 DC MDD6 DC | *-* *-* | | N 80903220 80903230 | 0896 1 | | ADDIF DC ADZIP DC | ZIPB-ZIPD ZIPD | USED TO CREATE MLSCF ADDR. INIT. RE-ENTRY ADRS | 03870 | |
| 0856 0 0000 0857 0 0000 | MOD7 DC BNTMP DC | *-* *-* | * EVEN | 80903240 | 0897 0 | 0000 4C00 0F12 | CKLK DC | *-* | ENTRY TO CK LOCK DPTION | 80903880 8090389 0 | |
| 0858 0 0000· | PCYL# DC | *-* | | 80903250 1 80903260 | | | BSC L | CKLKE | * RTN | 80903900 80903910 | |
| 0859 0 0000 085A 0 0000 | NCYL# DC ERSK1 DC | *-* *-* | NEXT DESIRED CYLINDER ODD | 8090327 0 | 089A 0 089B 1 | 0000 4C00 0F20 | CKPRT DC BSC L | *-* CKPRE | CHECK PRINT-ALL-ERRORS DPT | 80903920 | |
| 085B 0 0000 | CNTB DC | *-* | | 80903280 80903290 | 1 | | * | CRPRE | ENTRY POINT | 80903930 80903940 | |
| 085C 0 0000 085D 0 0000 | RTRYA DC RTRYB DC | *-* *-* | | 80903300 809 0 3310 | 089D 0 089E 1 | 0000 4000 0AE1 | CNTLE DC BSC L | *-* Cntl | BRANCH TO CONTROL * ROUTINE | 80903950 | |
| | RDDSW DC | *-* | ERROR CTRS EVEN | 80903320 | | - | * | | | 80903960 80903970 | |
| 0860 0 0001 | RDCMP OC K1 DC | *-* 1 | * ODO CONSTANT 1 | 80903330 80903340 | 08A0 0 08A1 1 | 4C00 0F64 | CDUNT DC BSC L | *-* CDUNE | ENTRY TO INCR SUMMARY * COUNT RTN | 80903980 | |
| 0861 0 0002 0862 0 0003 | K2 DC K3 DC | 2 | CONSTANT 2 | 80903350 | 08A3 0 | | * | | | 8090399 0 8090 40 00 | - |
| 0863 0 0004 | K4 DC | 4 | CONSTANT 3 CONSTANT 4 | 80903360 80903370 | 08A4 1 | 4C00 0DD3 | READ DC BSC L | *-* RDEN | | 809040 10 80904020 | - |
| 0864 0 0007 0865 0 0008 | K7 DC K8 DC | 7 8 | CONSTANT 7 CONSTANT 8 | 80903380 | 0846 0 | 0000 | - * RNDOM DC - | | | 80904030 | |
| 0866 0 00CA | K202 DC | 202 | CONSTANT 202 | 80903390 - 8090340 0 | | 4C00 0F09 | BSC L | ÷−* RNDME | | 80904040 80904050 | - |
| | K203 DC K331 DC | 203 331 | CONSTANT. 203 | 80903410 80903420 | 0849 0 | 0000 | * SETV DC | *-* | | 80904060 | × |
| 0869 0 2710 | K10TH DC | 10000 | CONSTANT 10000 DEC | 80903420 | | 4C00 0F2A | BSC L | | A 6 744 | 80904070 80904080 | and a second second second |
| 086A 0 0000 | SUMRY EQU PRSW DC | * - * - · | SUMMARY TABLE ORIGIN IF NON ZERO-BYPASS PRT | 80903440 80903450 | 0 8AC 0 | 0000 | * STMLS DC | | | 809040 9 0 | |
| 086B 0 0000 | PSSCT DC | *-* | PASS COUNT | 80903460 | | 4C00 OCF7 | BSC L | STMLE | | 80904100 80904110 | |
| | SKCNT DC SFTSK DC | *-* *-* | NUMBER OF SEEKS NUMBER SOFT SK ERRORS | 80903470 80903480 | 08AF 0 | 0000 | * STMSG DC | * - * | <u> </u> | 80904120 | |
| χ | | - | THE SOLIT ON ENDING | | | • | 21.25 00 | | ENTRY TO SET UP AND | 80904130 | - |

| BM MAINTENANCE DIÄGNOSTIC Blo a/B function test | PROGRAM FOR THE 1800 SYSTEM | PART NO. 2196378 PAGE 4 IBM | MAINTENANCE DIAGNOSTIC | PROGRAM FOR THE 1800 SYSTEM | PART NO. 219637 |
|--|--|--------------------------------|--------------------------------------|--|------------------------|
| | • | 231 | D A/B FUNCTION TEST | • | PAGE 4 |
| 08B0 1 4C00 0F6D | BSC L STMSE * PRINT A MESSAGE | 80904140 | 0A58 0 0282 | STO 2 RAO-TB SET RTN AOORESS | |
| 08B2 0 0000 | TEXIT OC *-* ENTRY OF CALL | 80904150 80904160 | 0A59 1 4C80 0A38 | BSC I ZIPA EXIT INITIALIZATION | |
| 08B3 1 4C00 0F33 | BSC L OFTXT TO TERMINATE OFT | 80904170 | | * * REQUEST/RELEASE DEVICE TO | 80904810 80904820 |
| 08B5 0 0000 | VERFY OC *-* ENTRY TO SEEK A CYL AND | 80904180 80904190 | | * GET AREA CODE IN OVA | 80904830 |
| 08B6 1 4C00 0003 | BSC L VRFYE * VERIFY THE SEEK | 80904200 | 0A5B 1 6600 087F | * ZIPB LOX L2 TB SET UP TABLE POINTER | 80904840 04850 |
| 0888 0 0000 | WRITE OC *-* ENTRY TO WRITE OATA | 80904210 80904220 | 0A5O 0 4242 0A5E 0 423F | BSI 2 ZRQOV-TB REQUEST DEVICE | |
| 08B9 1 4C00 0EC0 | BSC L WRTEN * ON THE OISK | 80904230 | UAJE U 423F | BSI 2 ZRLOV-TB RELEASE * | 80904860 80904870 |
| 08BB 0 0000 08BC 1 4C00 0CB9 | XEQ OC *-* ENTRY TO EXECUTE AN | 80904240 80904250 | | * CREATE IOCC'S FOR SENSE OSW | 80904880 |
| 0880 1 4000 0089 | BSC L XEQE * XIO INSTRUCTION * | 80904260 80904270 | 0A5F 0 C2A7 | LO 2 OVA-TB GET DEVICE AREA CODE | 80904890 80904900 |
| 08BE 0 0000 08BF 1 4C00 0CEE | ZRLOV OC *-* ENTRY TO RELEASE | 80904270 | 0A60 0 EAC5 0A61 0 02CC | OR 2 SNRES-TB SENSE OSW IOCC STO 2 SNXIO+1-TB * | 80904910 80904920 |
| | BSC L RLOVE * A OEVICE * | 80904290 80904300 | 0A62 0 EAE1 | OR 2 K1-TB SENSE-RESET OSW | 80904930 |
| 08C1 0 0000 08C2 1 4C00 0CAC | ZRQOV OC *-* ENTRY TO REQUEST | 80904310 | 0A63 0 D2C8 | STO 2 ZSNS+1-TB * FOR INTERUPT RTN * | 80904940 80904950 |
| 1 .000 OCAC | BSC L RQOV * A OEVICE ************************************ | 80904320 80904330 | | * AREA COOE = 4 8 9 | 80904960 |
| | * *DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD | 80904340 | | * 0VA = 2000 4000 4800 * A REGISTER= 2701 4701 4F01 | 80904970 - 80904980 |
| | * | 80904360 | 0A64 0 8000 | A ZIPC = 1880 1880 1880 | 80904990 |
| 0804 0174 | * COMA BSS E 372 THIS SETS BOCYL EVEN IF | 80904370 | 0A65 0 1880 | | 80905000 80905010 |
| 0A38 0 | ENOCM EQU * # BSS NUMBER IS EVEN | 80904380 80904390 | 0A66 0 0202 | * | 80905020 80905030 |
| | * * | 80904400 | 0A67 0 7021 | MOX PRECN GO TO PRE-CONTROL RTN | 007020 30 - |
| | * | 80904420 | 0A68 1 6600 087F | * ZIPO LOX L2 TB GET TABLE AORS TO IX2 | 80905080 80905090 |
| | *************************************** | 80904430 80904440 | 0A6A 0 4230 | BSI 2 STMSG-TB PRINT MESSAGE * | 80905100 |
| | * INITIALIZATION ROUTINE | 80904450 | 0A6B 0 5C00 0A6C 0 4233 | OC /5COO FORM NUMBER/MIO BSI 2 TEXIT-TB TERMINATE OFT | 80905110 80905120 |
| • | * | 80904460 80904470 | | *00000000000000000000000000000000000000 | 80905130 |
| 0A38 0 0000 0A39 0 4033 | ZIPA OC O ENTRY POINT | 80904480 | | * * LOOP PROGRAM ENTRY | 80905140 80905150 |
| | * | 80904490 80904500 | • | * | 80905160 |
| | * CLEAR SUMMARY TABLE | 80904510 | 0000 0 0000 | *DITION OF THE POINT | 80905170 80905180 |
| 0A3A 0 630C | LOX 3 SMLNG LENGTH OF SUMMARY TABLE | 80904520 80904530 | 0A6E 1 6600 087F 0A70 0 C283 | LOX L2 TB INDEX EQUAL AORS COMMON TB | 80905190 |
| 0A3B 1 D700 0869 0A30 0 73FF | ZIPL STO L3 SUMRY-1 CLEAR SUMMARY TABLE MOX 3 -1 OECR POINTER | 80904540 | 0A71 1 4C04 0A76 | BOO ZLPB BRANCH # BIT 15 SET | 80905200 80905210 |
| OA3E O 70FC | B ZIPL LOOP | 80904550 80904560 | 0A73 0 C220 0A74 0 O28B | | 80905220 |
| 0A3F 0 C283 | * LO 2 SWO-TB CLEAR TERMINATE OFT BIT | 80904570 80904580 | 0A75 0 0282 | STO 2 MLSCF+1-TB SET IN MLSCF STO 2 RAD-TB SET FOR MESSAGES ANO ERROR | 80905230 80905240 |
| 0A40 0 1801 0A41 0 1001 | SRA 1 CLEAR BIT 15 | 80904590 | 0A76 0 1010 | 7. C. | 80905250 80905260 |
| 0A42 0 0283 | SLA 1 * STO 2 SWO-TB PUT BACK IN SWO | 80904600 80904610 | 0A77 0 0281 | STO 2 RIO-TB CLEAR RIO | 80905270 |
| 0A43 0 C285 0A44 0 O201 | LO 2 SW2-TB GET SW FNC 10 | 80904620 | 0A78 0 02EB 0A79 1 4C80 0A60 | | 80905280 80905290 |
| 0A45 0 6302 | LOX 3 2 INITIAL VALUE | 80904630 80904640 | | *00000000000000000000000000000000000000 | 80905300 |
| 0A46 0 4820 0A47 0 1340 | SKP Z SKIP IF NO BITS SET | 80904650 | | | 80905310 80905320 |
| 0A48 0 1001 | SLA 1 GET RIO OF SIGN BIT | 80904660 80904670 | | * | 80905330 |
| 0A49 0 4820 0A4A 0 6302 | SKP Z SKIP IF ZERO LOX 3 2 ELSE USE INITIAL VALUE | 80904680. | 0A7B 0 0000 | 7504 44 | 80905340 80905350 |
| 0A4B 0 6B21 | STX 3 ZLPA TEMP STORAGE | 80904690- 80904700 | 0A7C 1 6600 087F 0A7E 1 2C40 08C5 | LOX L2 TB IX=TABLE AORS | 80905360 |
| 0A4C 0 C214 0A40 0 901F | LO 2 ADOEF-TB AORS OF OOEF+2 S ZLPA CREATE OOEF ENTRY | 80904710 | UATE 1 2040 0805 | * | 80905370 80905380 |
| 0A4E 0 02BC | STO 2 ODEFX-TB TEMPORARY | 80904720 80904730 | 0A80 0 6300 0A81 0 7301 | LOX 3 0 SET OELAY COUNTER | 80905481 |
| 0A4F 1 C480 083B 0A51 0 D2BC | LO I OOEFX PICK UP DOEF ENTRY STO 2 OOEFX-TB STORE FOR REQ/REL ROUTINES | 80904740 80904750 | 0A82 0 70FE | MOX *-2 LOOP UNTIL ZERO | 80905482 80905383 |
| 0A52 0 0202 0A53 0 82E1 | STO 2 FILE#-TB IN CASE PRINT | 80904760 | 0A83 0 423F | the state of the second | 80905384 |
| 0A54 0 4820 | A 2 K1-TB TEST FOR /FFFF SKP Z SKIP IF VALID EOIT | 80904770 | 0A84 0 1010 | SLA 16 CLEAR A REG. | 80905390 80905400 |
| 0A55 0 C216 0A56 0 8217 | LO 2 AOOIF-TB POINT TO ZIPO | | 0A85 0 D2A6 0A86 1 4C80 0A7B | STO 2 INTSW-TB CLEAR INT SWITCH | 80905410 80905420 |
| 0A57 0 028B | A 2 AOZIP-TB IF SKIP-POINT TO ZIPB STO 2 MLSCF+1-TB SET MLSCF ENTRY FOR RETURN | | 1 .000 ONID | * | 80905430 |
| | The same of the sa | | | * | 80905440 |
| • | | | | | |

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2310 A/B FUNCTION TEST

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PRDG ID

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| | * | | |
|--------------------------------------|------------------------------|--|----------------------|
| • | *0000000000000000 | | 80905450 |
| • | * | | 80905470 |
| | * PRE-CONTROL | ROUTINE | 80905480 |
| | * | | 80905490 |
| | * | | 80905500 |
| | * THIS ROUTINE | DETERMINES WHICH MODEL (A OR B) | 05510 |
| | * IS BEING TES | STED. IF FAST ACCESS, THE VARIABLE | 05520 |
| | * ID IS CREATE | ET NON-ZERO. THE PROPER FILE D ALSD (A1,A2,A3,B1,B2,B3). | 80905530 |
| | * THE SECTOR C | DUNT IN BITS 14-15 IN THE DSW | 05540 |
| | * ARE CHECKED | FOR SEQUENTIAL STEPPING. | 80905550 80905560 |
| | * | | 80905570 |
| | *000000000000000000 | 000000000000000000000000000000000000000 | 80905580 |
| | * | | 80905590 |
| 0A88 0 CEOC 0A89 0 40F1 | HCEOC OC /CED PRECN BSI ZEPA | | 80905600 |
| OASA O OACB | PRECN BSI ZEPA XID 2 SNXI | | 80905610 |
| 0A8B 0 02D1 | STO 2 TBDS | · · · · · · · · · · · · · · · · · · | 80905620 |
| 0A8C 0 E2E4 | ANO 2 K4-T | | 80905630 80905640 |
| 0 A 8 D 0 0 2 O E | STO 2 MDOE | | 05650 |
| 0A8E 0 4820 | SKP Z | SKIP IF ZERO | 80905660 |
| 0A8F 0 C210 | LO 2 HOOB | | 05670 |
| 0A90 0 4808 0A91 0 C20F | SKP + | SKIP FOR FAST ACCESS | 05680 |
| 0A92 0 EA02 | LD 2 HOOA DR 2 FILE | | 80905690 |
| 0A93 0 0202 | DR 2 FILE STD 2 FILE | 7 70 | 80905700 |
| 0A94 0 4230 | BSI 2 STMS | | 80905710 80905720 |
| 0A95 0 5A00 | OC /5AO | | 80905730 |
| 0A96 0 C291 | LO 2 ONLI | | 80905740 - |
| 0A97 1 4C20 C4B9 | BNZ PREC | H BRANCH IF ON LINE | 80905750 |
| 0A99 0 6780 012€ 0A9B 0 C780 0⊕DF | LOX I3 ENO | | 80905760 |
| 0A90 1 4C20 CAB9 | LO I3 15 BNZ PREC | | 80905770 |
| 0A9F 0 63FC | BNZ PREC LDX 3 -4 | | 80905780 |
| OAAO O 6BDA | STX 3 ZEPA | 75455554545555 | 80905790 80905800 |
| | * | | 80905810 |
| 0AA1 0 6700 07/D0 | PRECA LDX L3 2000 | TIMEOUT COUNT | 80905820 |
| OAA3 O OACB | PRECC XID 2 SNXI | | 80905830 |
| 0AA4 0 F006 0AA5 0 E2E3 | EOR ZEPA | | 80905840 |
| 0AA6 1 4C18 CAAA | AND 2 K3-TI BZ PREC | | 80905850 |
| 0AA8 0 73FF | MOX 3 -1 | | 80905860 80905870 |
| 0AA9 0 70F9 | B PREC | <u> </u> | 80905880 |
| | * | | 80905890 |
| OAAA O OACB | PRECB XID 2 SNXI | O-TB SENSE DSW | 80905900 |
| 0AAB 0 E2E3 0AAC 0 100C | AND 2 K3-TE | | 80905910 |
| 0AAD 0 18DC | SLA 12 RTE 28 | | 80905920 |
| OAAE 1 7401 GA7B | MDX L ZEPA | | 80905930 80905940 |
| OABO O 70F0 | B PRECA | | 80905950 |
| ` | * | | 80905960 |
| OAB1 0 1090 | SLT 16 | SET Q IN A | 80905970 |
| 0AB2 0 D2D3 | STD 2 MOD3- | ma ma- a | 80905980 |
| OAB3 O F2CO OAB4 1 4C18 QAB9 | EOR 2 MASK- | | 80905990 |
| 0AB6 0 4230 | BZ PRECH BSI 2 STMS(| | 80906000 |
| 0AB7 0 9E1F | DC /9E18 | | 80906010 80906020 |
| OAB8 0 4233 | | | 30906030 |
| OAB9 O C2BD | PRECH LD 2 XSKB | K-TB GET SEEK-TOWARD-HOME TOCC | 80906040 |
| OABA 0 1890 | SRT 16 | PUT IN Q | |
| OABB O C20E OABC O F2E4 | LD 2 MODEL | L-TB GET MODEL SWITCH | |
| 0ABD 0 4820 | EOR 2 K4-TE SKP Z | | 06070 |
| 0ABE 0 C2E7 | LD 2 K202- | | 30906080.~ |
| OABF 0 OAC9 | STD 2 ZX10- | -TB SET FDR XID | 06090 30906100 |
| 0ACO 0 423C | BSI 2 XEQ-T | TB XEQ ROUTINE 8 | 30906110 |
| OAC1 0 C28C | LD 2 TERM- | -TB SET WORO 1 TO "FFFF" - 8 | 30906120 |
| | | | |
| | | | |

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| 2210 4 | /D 54467724 7507 | | PART NO |
|--------|---------------------------------|---|--------------------------|
| 2310 A | /B FUNCTION TEST | | |
| | 0AC2 0 D246 0AC3 0 10A0 | STD 2 COMA+1-TB * | 80906130 |
| | 0AC4 0 0AD9 | SLT 32 CLEAR A AND Q STD 2 PCYL#-TB CLEAR PRESENT AND NEW | 80906140 |
| | OAC5 0 4224 | STD 2 PCYL#-TB CLEAR PRESENT AND NEW BSI 2 REAO-TB REAO SECTOR ZERO | |
| | OAC6 0 0141 | OC 321 WORD COUNT | 80906160 80906170 |
| | 0AC7 0 1313 | DC /1313 OATA EXPECTED | 80906180 |
| | 0AC8 1 0AC9 0AC9 0 4236 | DC PRECJ ERROR RETURN PRECJ BSI 2 VERFY-TB SEFK CYL. 190 | 80906190 |
| | OACA 0 00C7 | PRECJ BSI 2 VERFY-TB SEEK CYL. 199 DC 199 * | 80906200 |
| | OACB 1 0F33 | DC OFTXT ERROR RETURN | 80906210 80906220 |
| | 0466 0 6050 | * | 80906230 |
| | 0ACC 0 C2E3 0ACD 0 4224 | LD 2 K3-TB GET 3 | 80906240 |
| | OACE 0 401B | BSI 2 READ-TB READ CE HISTDRY TRACK DC 27+/4000 REAO 27 WDROS W/O CKI | |
| | - 7 | * * DSW DR DATA | |
| | OACF 0 C247 | LO 2 COMA+2-TB GET WORO 2 | 06270 80906280 |
| | OADO O FOB7 OAD1 1 4C18 OAO6 | EOR HCEOC CMP WITH S/B | 80906290 |
| | 0A03 0 4230 | BZ PRECG BRANCH IF OK BSI 2 STMSG-TB FLSF PRINT MESSAGE | 80906300 |
| • | 0AD4 0 5C01 | BSI 2 STMSG-TB ELSE PRINT MESSAGE DC /5C01 FDRM NUMBER/MIO | 80906310 |
| | OAD5 0 4233 | BSI 2 TEXIT-TB TERMINATE OFT | 80906320 80906330 |
| | 0AD6 1 6780 08C7 | PRECG LDX 13 COMA&3 ND BAD SECTORS-NOT CYL | .S 80906340 |
| | 0AD8 1 6500 081F | LOX L1 BAOCY AORS OF BAD CYL TABLE | 80906350 |
| | OADA 1 C700 08C6 | | 80906360 |
| | 0A0C 0 1883 | PRECF LD L3 COMA&2 GET BAD SECTOR NO. SRT 3 RIGHT JUSTIFY | 80906370 80906380 |
| | 0A0D 0 D100 | STO 1 0 STORE IN BAO CYL TABLE | 80906390 |
| | OADE 0 7101 | MDX 1 1 INCR PDINTER | 80906400 |
| | 0A0F 0 73F8 0AE0 0 70F9 | MOX 3 -8 OECR SECTDR CDUNTER B PRECF LOOP | 80906410 |
| | | B PRECF LOOP * | 80906420 |
| | | * | 80906430 80906440 |
| | | *00000000000000000000000000000000000000 | 1000 80906450 |
| | | * | 80906460 |
| | | * CONTROL ROUTINE * | 80906470 |
| | | * THIS ROUTINE SELECTS A TEST ROUTINE AND | 80906480 80906490 |
| | | * BRANCHES CONTROL TO IT. | 80906500 |
| | | * WHEN ALL ROUTINES ARE COMPLETE THIS ORDITA | 80906510 |
| | | * WHEN ALL ROUTINES ARE COMPLETE THIS ROUTI * BRANCHES TO MONITOR END ROUTINE. | |
| | | * | 80906530 80906540 |
| | 0033 0 | | BBBB 80906550 |
| | 0032 0 0AE1 0 4099 | LPCNI EUU 50 ROUTINE LOOP CDUNT | 80906560 |
| | 0AE2 0 C283 | CNTL BSI ZEPA INITIALIZE PROGRAM LD 2 SWO-TB GET SW FNC O | 80906570 |
| | OAE3 1 4CO4 0F33 | BOD DETXT BRANCH # TERM OFT SW D | 80906580 - N 80906590 |
| | 0AE5 0 C284 | LD 2 SW1-TB GET SW FNC 1 | 80906600 |
| | OAE6 1 4C20 OAF8 | BNZ CNTLD BRANCH IF NO RTN SELEC | |
| | OAE8 O C281 | LD 2 RID-TB GET RTN ID | 80906620 |
| | OAE9 O 82E1 | A 2 K1-TB ADD 1 | 80906630 |
| | OAEA O D281 | STD 2 RID-TB SAVE | 80906640 80906650 |
| | OAEB 0 9013 OAEC 1 4C10 OF38 | S RTTBL CK FOR VALID | 80906660 |
| | 04E0 1 4010 0F38 | BNN PRSUM BRANCH IF CDMPLETE | 80906670 |
| | OAEE 1 6580 0800 | CNTLB LDX II RID IX EQUAL RTN ID | 80906680 |
| | 0AF0 1 C500 0AFF | LD L1 RTTBL GET RTN ADRS | 80906690 80906700 |
| - | OAF2 0 D282 | * | 80906710 |
| × | OAF3 0 6132 | STO 2 RAD-TB SAVE RTN ADRS LOX 1 LPCNT SET LDDP COUNT | 80906720 |
| | OAF4 0 1010 | LOX 1 LPCNT SET LDOP COUNT SLA 16 CLEAR ROUTINE ERROR SW | 80906730 |
| | 0AF5 0 D20C | STO 2 RTNER-TB * | 80906740 80906750 |
| | OAF6 1 4C80 0801 | B I RAO BRANCH TO TEST RTN | 80906760 |
| | OAF8 0 D281 | • • • • • • • • • • • • • • • • • • • | 80906770 |
| | | CNTLD STO 2 RID-TB SET IN RTN ID | 80906780 |
| | | | |
| | OAF9 0 9005 OAFA 1 4C28 OAEE | S RTTBL CK FOR VALID BN CNTLB BRANCH IF OK | 80906790 80906800 |

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| a with this column days | -11(- | a standard secondardadore, sec | and an analysis of the state of | in classes management and a | | The same of the sa |
| IBM MAINTENANCE OIAGNOSTIC | PROGRAM FOR THE 180 | OO SYSTEM | | | | |
| | 100 | 50 3131Em | PART NO. 2196378 | IBM MAINTENANCE DIAGNOSTIC | PROGRAM FOR THE 1800 SYSTEM | DART NO CLOSE |
| 2310 A/B FUNCTION TEST . | | | PAGE 6 | 2310 A/B FUNCTION TEST | • | PART NO. 2196378 PAGE 6A |
| , | | | | TOTO WAR LONGITUM 1521 | | PAGE 6A |
| OAFC 0 4230 | | ASG-TB ELSE PRINT MESSAGE | 80906810 | OBZE O OACB | XIO 2 SNXIO-TR SENSE OSH | |
| 0AFO 0 5CO2 0AFE 0 4233 | DC /50 | 02 FORM NUMBER/MIO | 80906820 | . 082F 0 D201 | | 8090 7480 |
| UAPE U 4233 | BSI 2 TEX | (IT-TB TERMINATE OFT | 80906830 | 0B30 0 C2A7 | | 80907490 |
| | * | | 80906840 | OB31 O O2CA | LO 2 OVA-TB SET OUT OF CE MOOE IOCC STO 2 ZXIO+1-TB * | 80907500 |
| | * | ROUTINE ADORESS TABLE | 80906850 | 0B32 0 0AC9 | XIO 2 ZXIO-TB ISSUE XIO | 80907510 |
| OAFF O OOOF | RTTBL DC LRT | N-DITOL ASSOCIATION OF STANDARD | 80906860 | 0B33 0 C201 | LO 2 TBOSW-TB GET SAVEO OSW | 80907520 |
| 0800 1 080E | DC RTN | N-RTTBL LENGTH OF RTN AORS TAE 11 AOORESS OF TEST ROUTINE | LE 80906870 | | * | 80907530 |
| 0801 1 083D | DC RTN | 13 | - | | * CE NOT ROY/BUSY BITS SHOULD NOT BE ON | 80907540 80907550 |
| 0B02 1 0B5C | DC RTN | | 2 80906890 | 002/ 0.1002 | * | 80907560 |
| 0803 1 087F | DC RTN | | 3 80906900 4 80906910 | 0834 0 1803 0835 0 E2E3 | SRA 3 CHECK BITS 11-12 | 80907570 |
| 0804 1 0890 | DC RTN | 5 | 5 80906920 | 0836 1 4C18 0B3A | ANO 2 K3-TB TEST THE BITS FOR ZERO | 80907580 |
| 0B05 1 0B9A | DC RTN | 6 | 6 80906930 | 0838 0 4230 | BE KINIU BRANCH IF OK | 80907590 |
| 0806 1 08A5 | DC RTN | | 7 80906940 | 0B39 0 5E1C | BSI 2 STMSG-TB PRINT ERROR OC /5F1C MSG TO | 80907600 |
| 0807 1 08CC 0808 1 08F2 | DC RTN | | 8 80906950 | | OC /5E1C MSG IO | 80907610 |
| 0809 1 08F2 | DC RTN | | 9 80906960 | | * | 80907620 |
| 0B0A 1 0C31 | DC RTN: DC RTN | | 10 80906970 | 0B3A 0 71FF | RTN10 MOX 1 -1 OECR RTN LOOP CNTR | 80907630 |
| 0808 1 0C4E | | | 11 80906980 | 0B3B 0 7002 | . B RTN1 LOOP RTN | 80907640 |
| OBOC 1 OBAO | DC RTN: DC RTN: | 1 2 | 12 80906990 | 0B3C 0 421E | BSI 2 CNTLE-TB EXIT RTN | 80907650 |
| 0B00 1 0BA2 | DC RTN | 1 / | 13 80907000 | | * | 80907660 |
| OBOE O | LRTN EQU * | ENO OF RTN TABLE | 14 80907010 | | *** | 80907670 |
| | * | THO OF KIN TABLE | 80907020 | | * | 80907690 |
| | * | | 90007040 | | * TEST ROUTINE TWO | 80907700 |
| | *000000000000000000 | | III 80907050 | | * 71176 BOURSON | 80907710 |
| | * | | 80907060 | | * THIS ROUTINE READS ONE WORD INTO A STORAGE | |
| | * | TEST ROUTINE ONE | 80907070 | | * PROTECTED WORD AND CHECKS THE OSW FOR S. P. V | 80907730 |
| | * ************************************* | | 80907080 | | DETING ONE THE PROTECTED WORD TO THEN | 000000000 |
| | * PERCETON (| WILL CHECK INVALIO ADDRESS | 80907090 | | * CHECKED TO BE SURE NO DATA WAS READ INTO IT. | 80907750 |
| | * KESECITON () | FAST ACCESS) AND CE OSW BITS. | 07100 | | | 80907760 |
| | *00000000000000 | | 80907110 | 0830 0 C291 | RTN2 LO 2 ONLIN-TB GET ON-LINE SWITCH | |
| | * | | | 083E 1 4C20 0AE1 | BNZ CNIL EXIT RTN TE PRO ON-I THE | 80907780 |
| 080E 0 C20E | RTN1 LD 2 MODE | EL-TB GET OISK MODEL | 80907130 | 0840 0 C28C | WINSE SO S IEKM-IR SET MURU TO FOXES | 80907790 80907800 |
| 080F 0 4820 | SKP Z | SKIP IF SLOW ACCESS | 80907140 | 0841 0 D246 0842 1 2C41 08C5 | STO 2 CΩMΔ+1~TR ± | 80907810 |
| 0B10 0 C28C | LD 2 TERM | 4-TB GET FFFF | 07150 80907160 | 00+2 1 2041 0805 | STS L COMA+1,/41 SET STO PROTECT BIT | 80907820 |
| 0811 0 F201 | EOR 2 TBOS | W-TB MAKE BIT 13 ZERO | 80907170 | 0B44 0 1010 | * C. A. | 80907830 |
| 0B12 0 1000 | SLA 13 | CHECK BIT 13 | 80907180 | 0B45 0 4224 | SLA 16 SECTOR ZERO | 809078#0 |
| 0813 1 4C10 0817 | BNN RTN1 | | 80907190 | 0846 0 4001 | BSI 2 REAO-TB CALL READ RTN OC 1+/4000 ONE WORD-NO OSH CHECK | 07850 |
| 0815 0 4230 0816 0 5E14 | BSI 2 STMS | - I I I I I I I I I I I I I I I I I I I | 80907200 | 0B47 1 2C40 08C5 | STS I COMASI //O CLEAR COMMO DAW CHECK | 07860 |
| 0B17 0 C20E | DC /5E1 RTN1Q LD 2 MOOF | | 80907210 | | ↔ | 80907870 |
| 0B18 1 4C18 0B27 | | | 80907220 | 0849 0 CAC7 | | 80907880 |
| * .020 0521 | BZ RTN1 | G BRANCH IF SLOW ACCESS | 07230 | 084A 1 4C30 084F | RP PTN20 PD 15 14W 3 | 80907890 |
| 0B1A 0 C2B0 | LD 2 XSKB | K-TB SK TOWARD HOME IN CASE | 80907240 | 0B4C 0 1086 | SLT 6 TEST SPV | 80907900 |
| | * | OEVICE IS SLOW ACCESS | 07250 | 0840 1 4C28 0B51 | DN DTNO. | 80907910 |
| 081B 0 1890 | CDT 1/ | OCATOR TO SEOM WOOF22 | | | * | 80907920 |

| 0803 1 087F | DC | RTN4 | | 0000000 | | 0835 0 E2E3 | | SRA | 3 | CHECK BITS 11-12 | 80907570 |
|--------------------|------------|----------------|---------------------------|--|------------------------------|---|---------|--------|-----------------|--|-------------------|
| 0804 1 0890 | DC | RTN5 | • | 4 80906910 | | 0035 0 E2E3 | | ANO | 2 K3-TB | TEST THE BITS FOR ZERO | 80907580 |
| 0B05 1 0B9A | DC | RTN6 | | 80906920 | | OB36 1 4C18 OB3A | | ВZ | RTN10 | BRANCH IF OK | 80907590 |
| 0B06 1 0BA5 | DC | RTN7 | • | 80906930 | | 0838 0 4230 | | BSI | 2 STMSG-TB | PRINT ERROR | |
| 0807 1 08CC | DC | | • | 7 80906940 | | 0839 0 5E1C | | oc | /5E1C | MSG IO | 80907600 |
| 0808 1 08F2 | | RTN8 | 8 | 80906950 | | · F | * | | , | 1.30 10 | 80907610 |
| 0809 1 08F8 | DC | RTN9 | | 9 80906960 | | 1 | * | | | | 80907620 |
| 0B04 1 0C31 | DC | RTN10 | j | 10 80906970 | | OB3A O 71FF | RTN10 | MOY | 1 -1 | 0.50- | 80907630 |
| | DC | RTN11 | | 11 80906980 | | 0838 0 7002 | | | _ | DECR RTN LOOP CNTR | 80907640 |
| 0808 1 0C4E | DC | RTN12 | | 2 80906990 | | 083C 0 421E | | . B | RTN1 | LOOP RTN | 80907650 |
| OBOC 1 OBAO | DC | RTN13 | | | | 0000 0 4210 | -4- | BSI | 2 CNTLE-TB | EXIT RTN | 80907660 |
| 0800 1 08A2 | DC | RTN14 | į | 13 80907000 .4 80907010 | | 1 | * | | | | 0.000 |
| OBOE O | LRTN EQU | | ENO OF RTN TABLE | | | I . | *0000 | | 000000000000000 | 000000000000000000000000000000000000000 | 10 80007600 |
| | * | | | 80907020 | | I . | * | | | | |
| | * | | | | | | * | | TEST | ROUTINE TWO | 80907690 |
| | ********** | | | 80907040 | | | * | | | 1112 1110 | 80907700 |
| | * . | | | ¤ 80907050 | | | * | THIS | ROUTINE READ | S ONE WORO INTO A STORAGE | 80907710 |
| | 4 | | | 80907060 | | | * | PROT | FCTED HODO AND | S CHECKS THE DO A STORAGE | 80907720 |
| | * | TEST | ROUTINE ONE | 80907070 | | | * | REING | COLO WOKO AND | CHECKS THE OSW FOR S. P. | V 80907730 |
| | # | | | 80907080 | | | | DETITO | O DIA THE AKI | JIELIFO WORD IS THEN | 000077/0 |
| | * THI: | S ROUTINE WILL | CHECK INVALIO ADDRESS | 80907090 | | | * | CHECK | CEU TO BE SURE | NO DATA WAS READ INTO IT. | 80907750 |
| | * REJ | ECTION (FAST A | ACCESS) AND CE OSW BITS. | 07100 | | | * | | | | |
| | * | | * OI | | | 0B30 0 C291 | *00001 | 300000 | 100000000000000 | 000000000000000000000000000000000000000 | n 80907770 |
| | *00000000 | 000000000000 | | 80907110 | | 0030 0 (291 | RTN2 | LO | 2 ONLIN-TB | GET ON-LINE SWITCH | |
| | * | | | B 80907120 | | 0B3E 1 4C20 0AE1 | | BNZ | CNTL | EXIT RTN IF PRG ON-LINE | 80907780 |
| 080E 0 C20E | RTN1 LD | 2 MODEL TO | CST OLGU WARE | 80907130 | | 0840 0 C28C | RTN2L | LO | 2 TERM-TB | SET WORD TO FOXES | 80907790 |
| 080F 0 4820 | | 2 MODEL-TB | GET DISK MODEL | 80907140 | | 0841 0 D246 | | STO | 2 COMA+1-TB | TI WOKO TO PUXES | 80907800 |
| 0B10 0 C28C | SKP | 2 7 7 7 7 7 7 | SKIP IF SLOW ACCESS | 07150 | | 0842 1 2041 0805 | | | 1 COMA+1 //1 | SET STO PROTECT BIT | 80907810 |
| | LD | 2 TERM-TB | GET FFFF | 80907160 | | Ī | * | 0.0 | COMATI,741 | SEL STO PROTECT BIT | 80907820 |
| 0B11 0 F201 | EDR | 2 TBOSW-TB | MAKE BIT 13 ZERO | 80907170 | | 0B44 0 1010 | | C i A | • . | | 80907830 |
| 0812 0 1000 | SLA | 13 | CHECK BIT 13 | 80907180 | | 0845 0 4224 | | SLA | 16 | SECTOR ZERO | 809078#0 |
| 0B13 1 4C10 0B17 | BNN | RTN1Q | BRANCH IF CORRECT | 80907190 | | 0846 0 4001 | | BSI | 2 REAO-TB | CALL READ RTN | 07850 |
| 0B15 0 4230 | BS I | 2 STMSG-TB | PRINT ERROR | | | 0847 1 2C40 08C5 | | oc | 1+/4000 | ONE WORD-NO OSW CHECK | 07860 |
| 0816 0 5E14 | DC | /5E14 | MESSAGE IO | 80907200 | | 0047 1 2040 0805 | | STS | L COMA&1,/40 | CLEAR STORAGE PROTECT | 80907870 |
| 0B17 0 C20E | RTN1Q LD | 2 MOOEL-TB | | 80907210 | | 00/0 0 0100 | * | | | The state of the s | |
| 0B18 1 4C18 0B27 | BZ | RTN1G | GET OISK MODEL | 80907220 | | 0B49 0 CAC7 | | L00 | 2 ZSNS-TB | GET INTRPT OSW | 80907880 |
| | * | KINIG | BRANCH IF SLOW ACCESS | 07230 | | 084A 1 4C30 0B4F | | ВР | RTN20 | | 80907890 |
| 0B1A 0 C2B0 | | 2 2022 | | 80907240 | | 084C 0 1086 | | SLT | 6 | BR IF 'ANY ERROR' INO NOT | |
| 0014 0 0280 | ± LD | 2 XSKBK-TB | SK TOWARD HOME IN CASE | 07250 | | 0B40 1 4C28 0B51 | | BN | RTN2A | TEST SPV | 80907910 |
| 0010 0 1000 | · | | OEVICE IS SLOW ACCESS | | | | * | U.* | RINZA | BR IF NO SPV INO. IN OSW | 80907920 |
| 0818 0 1890 | SRT | 16 | TO Q REG. | 80907260 | | 0B4F 0 4230 | RTN20 | D C 1 | 3 CT14C0 =- | | 80907930 |
| OB1C O D245 | STO | 2 COMA-TB | OON'T CHECK BUSY AFTER XI | 0 80907270 | | 0850 0 5E1D | | | 2 STMSG-TB | NO SPV INO. IN OSW | 80907940 |
| 0B10 0 C2E8 | LD | 2 K203-TB | CONSTANT=203 | | | 0000 0 0010 | | oc | /5E10 | MESSAGE IO | 80907950 |
| OBIE O OAC9 | STD | 2 ZXIO-TB | SET FOR XIO IN XEQ | 80907280 | | 0051 0 0044 | * | | | | 80907960 |
| OB1F 0 423C | BSI | 2 XEQ-TB | ISSUE INVALIO SEEK | 80907290 | | 0851 0 C246 | RTN2A | LO | 2 COMA+1-TB | TEST COMA+1 FOR FOXES | |
| | * | E VER-10 | 1330E INVALID SEEK | 80907300 | | 0852 0 0203 | | STO | 2 MO03-TB | IN CASE PRINT | 80907970 |
| 0B20 1 4C10 0B25 | - | E D D 3 | | 80907310 | | 0B53 0 F28C | | EOR | 2 TERM-TB | # | - 80907980 |
| 0822 0 100A | BNN Sla | ERR1 | BRANCH TO ERROR | 80907320 | | 0854 1 4C18 0B59 | | BZ | RTN2B | BR IF OK | 80907990 |
| 0823 1 4C28 0B27 | | 10 | CK INVALIO BIT | 80907330 | | 0856 0 4230 | | _ | | | 8090800 0 |
| 0023 1 4028 0827 | BN | RTN1G | BRANCH IF NO ERROR | 80907340 | | 0857 0 9E1E | | 0C | _ | CPU ERROR | 80908010 |
| - | * | | | 80907350 | | 0858 0 421E | | | /9E1E | MESSAGE IO | 80908020 |
| - | * | INVAL | LIO AORS BIT NOT ON | 80907360 | | | * | BSI | 2 CNTLE-TB | TERMINATE ROUTINE | 80908030 |
| | * | | | | | 0859 0 71FF | | | | | 80908040 |
| 0B25 0 4230 | ERR1 BSI | 2 STMSG-TR | - PRINT ERROR | 80907370 | | 085A 0 70E5 | RTN2B I | | 1 -1 | OECR RTN LOOP CNT | 80908050 |
| 0B26 0 5E1B | DC | /5E1B | MSG IO | 80907380 | | 005A U 70E5 | | В | RTN21 | LOOP | |
| | * | 75210 | H36-10 | 80907390 | | 0B5B 0 421E | E | 3S I | 2 CNTLE-TB | ENO OF ROUTINE | 80908060 |
| 0827 0 C291 | RTN1G LD | 2 ON: IN TO | 057 04 4 545 5 | 80907400 | 5 | | * | | · - | THE ST ROOTINE | 80908070 |
| 0B28 1 4C20 0B3A | | 2 ONLIN-TB | GET ON-LINE SWITCH | 80907410 | we we say . I will see a see | Supplies of State and American | *000000 | 100000 | | 0000000000000 | 8090808 0 |
| 0824 0 C2E1 | - BNZ | RTN10 | BRANCH IF ON LINE NOW | 80907420 | | | * | | | 900000000000000000000000000 | 80908090 |
| ODEA O CALT | LD | 2 K1-TB | IOCC MODIFIER | 80907430 | | | * | | | | 809081 0 0 |
| OB2B O EAA7 | OR | 2 DVA-TB | | 80907440 | | | | | TEST R | OUTINE THREE | 80908110 - |
| 0B2C 0 02CA | STD | 2 ZXI0+1-TB | * | 80907450 | | | * - | | | | 80908120 |
| 0B20 0 0AC9 | XIO | 2 ZX 10-TB | ISSUE CE MODE | | | | * . T | HIS R | UUTINE WILL S | EEK 2 IN ANO 1 OUT FROM | 80908130 |
| | * | | 1000 OF HODE | 80907460 | | | ~ ι | AL INO | IER ZERO TO CY | I INOFR 202 EYCEDT | |
| | | | | 80907470 | | | * C | YLINO | ERS 90-110. | THE ROUTINE WILL THEN | 80908140 |
| | | | | Take Time and the second secon | | | | | | - MOOTINE, HILL INEN | 80908150 |
| 3 | | | | - | | | - | | | • | |
| | | | | | | | | | | • | |

OATE 04NOV66 EC NO. 415233

PROG TO

PAGE

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04N0V66 010CT67 15FEB68 02OEC68 14NOV69 30JAN70 20MAR70 415233 411875 411913 411961 431319 431319A 431320

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04NOV66 010CT67 15FEB68 02OEC68 14NOV69 30JAN70 20MAR70 415233 411875 411913 411961 431319 431319A 431320

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EC NO.

| | * SEEK 2 OUT AND 1 IN FROM CYLINDER 202 TO | | 10 A/B FUNCTION TEST | | |
|--|---|--|---|--|---|
| | * CYLINDER ZERO. EACH SEEK IS VERFIED FOR * PROPER CYLINDER REACHED. * | 80908160 80908170 80908180 80908190 | 088B 0 0000 088C 1 0885 088D 0 71FF 088E 0 70F6 | RTN4C DC *-* CYL. DESIRED DC RTN4A IF INVALID, DON'T COUNT MDX 1 -1 ELSE COUNT B RTN4A LOOP | 80908840 80908850 80908860 80908870 |
| 0B5C 0 63FF 0B5D 0 6B1F 0B5E 0 6302 | *DECR SEEKS BY ONE STX 3 INCR1 * LDX 3 2 INCR SEEKS BY TWO | 30908200 80908210 80908220 | 0B8F 0 421E | 8SI 2 CNTLE-TB END OF RTN * * | 809 0 888 0 80908890 |
| 0B5F 0 6B1E 0B60 0 C2E1 0B61 0 4007 | STX 3 INCR2 * LD 2 K1-TB FIRST CYL. WILL BE HOME BSI RTN3P EXECUTE SUCCESSIVE SEEKS | 80908230 80908240 80908250 80908260 | | * ******************************* | 80908910 80908920 80908930 80908940 |
| 0B62 0 63FE 0B63 0 6B19 0B64 0 6301 | LDX 3 -2 DECR SEEKS BY TWO STX 3 INCR1 * LDX 3 1 INCR SEEKS BY ONE | 80908270 80908280 80908290 | | * CK 320 WORDS OF HEX 1313 * FROM CYL 1-SECT O * | 80908950 80908960 8 0 9089 70 |
| 0865 0 6818 0866 0 C2E8 0867 0 4001 0868 0 421E | STX 3 INCR2 * LD 2 K203-TB INI. CYL. + 1 8SI RTN3P EXECUTE SUCCESSIVE SEEKS BSI 2 CNTLE-TB EXIT ROUTINE | | 0B90 0 6301 0B91 0 6100 0892 0 C2BF | RTN5 LDX 3 1 IX EQUAL CYL LDX 1 0 IX EQUAL WRITE SW CMN2 LD 2 H1313-T8 GET DATA EXPECTED | 80908980 80908990 80909000 80909010 |
| 0869 0 0000 086A 0 DOOC 086B 0 6500 OOCA | * RTN3P DC *-* ENTRY POINT STO RTN3T STOR FOR CALL LDX L1 202 NO. IF SEEKS | 80908340 80908350 80908360 80908370 | 0B93 0 6200 0B94 0 69F6 0B95 0 6A7E 0B96 0 6600 0141 | LDX 2 0 IX EQUAL SECTOR CMN1 STX 1 RTN4C SET RTN VALUES STX 2 SECTD * LDX L2 321 IX-EQUAL WD CT | 80909020 80909030 80909 0 40 80909050 |
| 086D 0 C009 086E 0 800E 086F 0 D001 | * RTN3Q LD RTN3T GET CYL. NO. A INCR1 INCR OR DECR | 80908380 80908390 80908400 80908410 | 0B98 0 6132 0B99 0 700F | LDX 1 LPCNT IX EQUAL LOOP CTR B CMRT2 BRANCH TO COMMON RTN ************************************ | 80909060 80909 07 0 8090908 0 8090909 0 |
| 0B70 0 4236 0B71 0 0000 0B72 1 0B73 | STO RTN3R STORE FOR SEEK BSI 2 VERFY-TB SEEK CYL. AND VERIFY RTN3R DC *-* CYLINDER NO. DC RTN3S ADRS ERROR RETURN | 80908420 80908430 80908440 80908450 | | * TEST ROUTINE 6-READ AND * CHECK 320 WORDS OF HEX E5E5 * FROM CYL 201-SECT 6 | 8 0 9091 0 0 80909110 8090912 0 |
| 0B73 0 COFD 0B74 0 8009 0B75 0 D001 0B76 0 4236 | RTN3S LD RTN3R GET LAST CYL. NO. A INCR2 INCR OR DECR STO RTN3T STORE FOR SEEK BSI 2 VERFY-TB CALL VERFY ROUTINE | 80908460 80908470 80908480 | 0B9A 0 6700 00C9 0B9C 0 6100 | *DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD | 80909130 80909140 80909150 80909160 |
| 0B77 0 0000 0B78 1 0B79 0B79 0 71FF 0B7A 0 70F2 | RTN3T DC *-* CYLINDER DESIRED DC RTN3U INVALID ADRS RETURN RTN3U MDX 1 -1 DECR COUNTER B RTN3Q NOT FINISHED | 80908490 80908500 80908510 80908520 | 0B9D 0 C2CD 0B9E 0 6206 0B9F 0 70F4 | CMN3 LD 2 HE5E5-TB GET DATA EXPECTED LDX 2 6 . IX EQUAL SECTOR MDX CMN1 BRANCH TO COMPLETE SETUP ***DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD | 80909170 80909180 80909190 80909200 |
| 087B 1 4C80 0B69 0B7D 0 0000 0B7E 0 0000 | B I RTN3P RETURN * INCR1 DC 0 INCR2 DC 0 | 80908530 80908540 80908550 80908560 | * | * TEST ROUTINE THIRTEEN * WRITE AND READ 320 WORDS * OF HEX 1313 ON CYL 2-SECT | 80909210 80909220 80909230 80909240 |
| | * | 80908570 80908580 | 0BAO 0 6302 | * O-CHECK DATA READ * *================================== | 80909250 80909260 80909270 |
| | * TEST ROUTINE FOUR | 80908610 80908620 | OBA1 0 70F0 | RTN13 LDX 3 2 IX EQUAL CYL B CMN2 BRANCH TO COMPLETE SETUP *********************************** | 80909280 80909290 80909300 80909310 |
| | * THIS ROUTINE WILL ISSUE AND VERFY 100 RANDOM * SEEKS. CYLINDERS 90-110 WILL NEVER BE * ATTEMPTED. * | 80908650 80908660 | | * TEST ROUTINE FOURTEEN- * WRITE AND READ 320 WORDS * OF HEX E5E5 ON CYL 202- * SECTOR 6-CHECK DATA READ | 80909320 80909330 80909340 80909350 |
| 087F 0 7132 0880 0 C29E 0881 0 4818 0882 0 C2F8 | ************************************** | 80908690 80908700 80908710 | - OBA2 O 6700 OOCA OBA 4 O 70 F8 | * ************************************ | 80909360 80909370 80909380 80909390 |
| 0883 0 D2F7 0884 0 7002 | STO 2 FRNSK-TB FIRST RANDOM NUMBER B RTN4B * | 80908720 80908730 80908740 80908750 | | ** | 80909400 80909410 80909420 |
| 0886 0 4227 | RTN4A LD 2 PRNSK-TB GET LAST RNDM NUMBER BSI 2 RNDOM-TB GENERATE NEXT * RTN4B STO 2 PRNSK-TB SAVE | 80908750 80908760 80908770 80908780 | | * TEST ROUTINE SEVEN-READ * ZERO WORDS * | 80909430 80909440 80909450 80909460 |
| 0888 0 1808 0889 0 0001 | SRA 8 * FROM 0-202 STO RTN4C STORE FOR SEEK | 80908790 80908800 80908810 80908820 | OBA5 O 6301 OBA6 O 6200 OBA7 O 6AE3 OBA8 O 6A6B | RTN7 LDX 3.1 SET CYL TO USE LDX 2.0 SET WORD COUNT STX 2.RTN4C CLEAR WRITE SW | 80909470 80909480 80909490 |
| 088A 0 4236 | BSI 2 VERFY-TB SEEK AND VERIFY CYL. | 80908830 | ODAG V GAGE | STX 2 SECTD SET SECTOR * | 80909500 809 0 9510 |

| .10 A/D | FUNCTION TEST | * | | | 000-055 | 2310 A/ | B FUNCTION TEST OBOF O 7001 | ۵ | D TALON | ODTION NOT CET | 00010000 | |
|---------|--|-----------------------------|--|---|----------------------------------|-----------------------|--|--|--|---|---|--|
| • | | * * * | | ROUTINE IS COMMON TO ROUTINES 5, 6, 7, 13 AND 1 | 80909550 | | OBEO 0 7001 OBEO 0 7002 OBE1 0 C2E1 OBE2 0 02EB | RTN8N LD STO | RTN8N RTN8A 2 K1-TB 2 PRSW-TB | OPTION NOT SET OPTION SET SET PRINT SW NDN-ZERD | 80910200 ⁵ 80910210 80910220 80910230 | |
| | OBA9 O 6BO7 OBAA O 6AOF | CMRT2 STX | 2 WDCTA | SET CYLINDER TO USE SET WORD COUNT | 80909560 80909570 80909580 | | OBE4 0 70EC | RTN8A MDX MDX | 1 -1 RTN8L | OECR RTN LDOP CDUNT LDOP | 80910240 80910250 80910260 | |
| | OBAB O 6A13 OBAC O 000E OBAO O DO12 | STX STO STO | 2 CMRTC OATA1 OATA2 | SET IN READ CALL SET OATA EXPECTED SET DATA EXPECTEO | 80909590 80909600 80909610 | | OBE5 0 1010 OBE6 0 D2EB OBE7 0 CADB | SLA STO LDD | 16 2 PRSW-TB 2 ERSK1-TB | CLEAR A REG. CLEAR PRINT SWITCH GET ERRDR CNTS | 80910270 80910280 80910290 | |
| | OBAE 1 6600 087F OBBO 0 4236 OBB1 0 0000 | LDX BSI CYL OC | L2 TB 2 VERFY-TB +-* | INDEX EQUAL TBL ADRS SEEK DESIRED CYL AND * VERIFY THE SEEK | 80909620 80909630 80909640 | | OBE8 O OAO3 OBE9 O 82OC OBEA 1 4C18 OAE1 | STD A BZ | 2 MOD3-TB 2 CNTB-TB CNTL | STORE IN CASE PRINT ADO ERROR CNTB EXIT ROUTINE IF ZERD | 80910300 80910310 80910320 | |
| | 0BB2 1 0AE1 0BB3 0 C28C 0BB4 0 D246 | OC CMRTL LD | CNTL 2 TERM-TB | EXIT ON ERROR SET DATA EXPECTED | 80909650 80909660 | | OBEC O 4230 OBEO O 3E1A OBEE O 421E | BSI OC BSI | 2 STMSG-TB /3E1A 2 CNTLE-TB | PRINT MESSAGE MIO/FORM NUMBER | 80910330 80910340 | |
| | OBB5 O COO5 OBB6 1 4C18 OBBD | STO LO BZ | RTN4C CMRTB | SET FDR COMPARE RTN IS RDUTINE TD WRITE BRANCH TO REAO ONLY | 80909670 80909680 80909690 | | OBEF 1 7401 085B | * | | | 80910350 80910360 80910370 | |
| | OBB8 0 C05B OBB9 0 4239 OBBA 0 0000 | LO BSI WDCTA DC | SECTD 2 WRITE-TB +-* | GET SECTOR DESIRED GO WRITE OATA WDRO COUNT | 80909700 80909710 80909720 | i | OBF1 0 70EC | RTN8J MDX MDX ******************************** | L CNTB,1 RTN8M | INCR ERRDR COUNT LDOP 1000000000000000000000 | 80910380 80910390 80910400 | |
| | OBBB 0 0000 OBBC 1 0BB0 OBBD 0 C056 | DATA1 OC OC CMRTB LD | *−* CMRTB SECTO | DATA EXPECTEO EXIT ON ERRDR GET SECTOR TO READ | 80909730 80909740 80909750 | | | * * | | TINE NINE-WRITE 320 DDM WDRDS-READ AND CK- | 80910410 80910420 80910430 | |
| | OBBE 0 4224 OBBF 0 0000 OBCO 0 0000 | BSI CMRTC OC OATA2 OC | 2 READ-TB *-* *-* | GO REAO OATA WDRO COUNT DATA EXPECTEO | 80909760 80909770 80909780 | | | * * ********************************** | ON C | CYL 2-SECT 0. | 80910440 80910450 80910460 | |
| | 0BC1 1 0BC8 0BC2 0 C20C | DC LO | CMRTF 2 RTNER-TB | CMP ERROR-CONTINUE GET ERROR COUNT | 80909790 80909800 | 18 | OBF2 O 4236 OBF3 O 0002 OBF4 1 OAE1 | RTN9 BSI DC DC | 2 VERFY-TB 2 CNTL | | 80910470 80910480 | |
| | OBC3 O 4218 OBC4 1 OBB3 | BSI DC | 2 CKLK-TB CMRTL | CK LDCK-ON ERRDR LODP IF SET | 80909810 80909820 80909830 | | 0BF5 0 6300 0BF6 0 C2FA | LDX LO | 3 0 2 LRN1-TB | IX EQUAL SECTOR O GET BEGIN PATCH DPTION | 80910490 80910500 80910510 | |
| | 0BC5 0 71FF 0BC6 0 70EC QBC7 0 421E | MDX MOX BSI | 1 -1 CMRTL 2 CNTLE-TB | OECR LOOP RTN CNT LOOP RDUTINE EXIT RDUTINE | 80909840 80909850 80909860 | | 0BF 7 0 7005 | *00000000 * | RT910 | BRANCH TD CDMMON | 80910520 80910530 80910540 | |
| | OBC8 O D2OC OBC9 O 4218 | * CMRTF STO BSI | 2 RTNER-TB 2 CKLK-TB | SET ERROR SWITCH CHECK LOCK-ON-ERROR | 80909870 80909880 80909890 | | | * | RAND | INE TEN-WRITE 320 OM WDROS-READ AND CK- 202-SECT 6. | 80910550 80910560 80910570 | |
| | OBCA 1 OBB3 OBCB 0 421E | DC BS I | CMRTL 2 CNTLE-TB | IF DN TERMINATE ROUTINE | 80909900 80909910 | | OBF8 0 4236 | * *000000000 RTN10 BSI | oooooooooooooooooooooooooooooooooooooo | SEEK CYL 202-VERIFY | 80910580 80910590 80910600 | |
| | | * | TEST | ROUTINE EIGHT- | 80909920 80909930 80909940 | | OBF9 O OOCA OBFA 1 OAE1 OBFB O C2FC | DC DC LD | 202 CNTL 2 LRN2-TB | * THE SEEK TERMINATE DN ERRDR GET BEGIN PATCH DPTION | 80910610 80910620 | |
| | | * | READ ERRDR | CYL 1-SECT O USING CK-CK FOR ANY DSW S ANO CK THAT ND | 80909950 80909960 80909970 | 1 | 0BFC 0 6306 | LDX | 3 6 | IX EQUAL SECTOR 6 | 80910630 80910640 80910650 | |
| | | * | MEMOR | | 80909980 80909990 80910000 | | | * | | PORTION COMMON TO INES NINE AND TEN. | 80910660 80910670 80910680 | |
| -17 | OBCC 0 4236 OBCD 0 0001 | RTN8 BSI DC | | DOUDDOODDOODDOODDOODDOODDOODDOODDOODDOO | 80910010 80910020 80910030 | | OBFD 0 6B16 | RT910 STX | 3 SECTD | SAVE SECTOR NUMBER | 80910690 80910700 80910710 | |
| | OBCE 1 OAE1 OBCF 0 10A0 OBDO 0 DADB | DC SLT STD | CNTL -32 2 ERSK1-TB | EXIT IF ERROR CLEAR AQ CLEAR ERROR COUNTERS | 80910040 80910050 80910060 | | OBFE 0 4820 OBFF 0 DO2F OCOO 0 C29F | SKP STO LD | Z LSTNO 2 RNDWR-TB | SKIP IF ZERO SAVE BEGIN PATCH DPTION GET START OPTION | 80910720 80910730 80910740 | |
| - | OBD1 0 C2DA OBD2 0 1003 | * RTN8L LD SLA | | GET CYL. SOUGHT CREATE PROPER SECTOR ID | 80910070 80910080 80910090 | | 0C01 0 4818, 0C02 0 C02C 0C03 0 D02C | SKP LD STO | &- LSTNO FSTND | SKIP IF NDN ZERO CONTINUE PATTERN SET RTN FIRST NUMBER | 80910750 80910760 80910770 | |
| | 0BD3 0 D246 0BD4 0 C2C4 0BD5 0 4224 | STO LD BSI | 2 COMA+1-TB 2 ROCHK-TB 2 REAO-TB | SET IN I/O AREA SET REAO CK MODIFIER | 80910100 80910110 | | 0C04 0 C29F 0C05 0 4820 0C06 0 D028 | RTN9L LD SKP STO | 2 RNDWR-TB Z LSTNO | GET START OPTION SKIP IF ZERD SET AS LAST NUMBER | 80910780 80910790 | |
| | 0BD6 0 0141 0B07 0 FFFF 0BD8 1 0BEF | DC DC | 321 /FFFF | READ ROUTINE 321 WORDS DATA EXPECTED | 80910120 80910130 80910140 | | 0C07 0 6700 FEC0 0C09 0 C025 | . * | L3 -320 LSTNO | NUMBER OF WORDS | 80910800 80910810 80910820 | |
| (| 0BD9 0 C2C7 0BDA 1 4C10 0BE3 | DC LD BNN | RTN8J 2 ZSNS-TB RTN8A | CMP ERROR RETURN GET INTRPT DSW BRANCH ON ERROR | 80910160 80910170 | | OCOA O DOOE | \$T0 | RTN9C | GET LAST NUMBER SET IN READ CALL | 80910840 80910850 | Control of the Contro |
| | OBDC 1 7401 085A OBDE 0 421B | | L ERSK1+1 2 CKPRT-TB | INCR ERROR CNT CK PRINT-ALL OPTION | 80910180 80910190 | | OCOB 1 D700 0A06 OCOD 0 4227 | RTN9A STO BSI | 2 RNDOM-TB | SET PATTERN GENERATE NEW NUMBER | 80910B60 80910870 | |
| | | | | | | | | terite qui la ga e | | | | 00 |
| ND • | 04N0V66 010CT67 415233 411875 | | 02DEC68 14N0 411961 4313 | 0V69 30JAN70 20MAR70 319 431319A 431320 | PROG ID | 0809-2 DATE EC NO. | 04N0V66 010CT67 415233 411875 | | | NOV69 30JAN70 20MAR70 L319 431319A 431320 | PROG ID PAGE | 0809-2 8A |

| -10 M/C | | | | | PAGE | 0. 2196378 | | CE DIAGNOSTIC | TROOKAN | 10K IIIE 1800 3 | TSTEM | | NO. 2196378 |
|---------|---------------------------------|---|-------------------------|--|---------------------------------------|---------------------------------------|---------------|------------------|----------------|--|--|------------------------------|---|
| | B FUNCTION TEST | | | | : | 9 | 2310 A/B FUNC | TIDN TEST | | | | PAGE | 9/ |
| | 0C0E 0 7301 | MDX | | DECR WORD COUNT | 80910880 | | 0034 | 0 1010 | RT11A | CI A 1 | D. T. L. D. L. | | |
| | 0C0F 0 70FB 0C10 0 D01E | MDX | | LDOP | 80910890 | | | 0 4224 | | SLA 16 BSI 2 READ-TI | READ CYL 2-SECT 0 | 80911560 | |
| * | 3010 0 0010 | \$TO | LSTNO | SET NEW LAST NUMBER | 80910900 | | | 0 0141 | | DC 321 | * | 80911570 80911580 | |
| | 0C11 0 C002 | LD | SECTO | GET SECTOR NUMBER | 80910910 | | | 0 0000 | | DC 0 | DATA EXPECTED | 80911590 | |
| | 0C12 0 4239 0C13 0 4141 | . BSI | 2 WRITE-TB | WRITE DATA | 80910920 80910930 | | UCSE | 1 OC4A | * | DC RT11C | EXIT IF ERROR | 80911600 | |
| | 0013 0 4141 | DC * | /4141 | NO. DF WORDS/DON'T PRESET | 80910940 | | 0C3F | 0 1010 | RT118 | SLA 16 | WRITE CYL 2-SECT O | 80911610 | |
| | 0C14 0 0000 | SECTD DC | *-* | * THE I/O AREA SECTOR TO USE-O OR 6 | 80910950 | | 0C40 | 0 4239 | | BSI 2 WRITE-1 | TB * WITH /1313 | 80911620 80911630 | |
| | OC15 1 OC16 | OC | RTN9B | ERROR RETURN | 8091096 0 80910970 | | | 0 0141 0 1313 | | DC 321 | 321 WORDS | 80911640 | |
| | OC16 O COFD | * RTN9B LO | CECTO | | 80910980 | | | 1 0C4A | | DC /1313 DC RT11C | DATA EXIT IF ERROR | 80911650 | |
| | 0C17 0 4224 | BSI | SECTD 2 READ-TB | GET SECTOR NUMBER READ DATA-COMPARE | 80910990 | | 0C44 | 0 C20C | | LD 2 RTNER-1 | TB GET ROUTINE ERROR SW | 80911660 80911670 | |
| | 0C18 0 8141 | DC | 321+/8000 | WORD COUNT/RANDOM NUMBERS | 80911000 | | | 0 4218 | | BSI 2 CKLK-TE | CHECK LOCK-ON-ERRDR | 80911680 | |
| • | OC19 0 0000 OC1A 1 OC2B | RTN9C DC | *-* | BEGINNING DATA WORD | 80911010 80911020 | | 0046 | 1 0C35 | * 1 | DC RT11L | LDOP | 80911690 | |
| | OCIA I UCZB | DC * | RTN9E | USE SAME PATTERN | 80911030 | | 0C47 | 0 71FF | • | MDX 1 -1 | DECR LOOP COUNT | 80911700 80911710 | |
| | OC1B O C2OC | LD | 2 RTNER-TB | GET ERROR SW | 80911040 | , i | 0C48 | 0 70EC | 1 | MDX RT11L | LDOP ROUTINE | 80911710 | |
| | 0C1C 0 4218 | BSI | 2 CKLK-TB | CK LOCK ON ERRDR | 80911050 80911060 | • | 0C49 | 0 421E | <u>.</u> | BSI 2 CNTLE-1 | | 80911730 | |
| | 0C1D 1 0C04 0C1E 0 71FF | DC | RTN9L | RETURN IF ON | 80911070 | | 0C4A | 0 D20C | * RT11C S | STD 2 RTNER-1 | B SET ERRDR SW | 80911740 | |
| | OC1F 0 70E4 | MOX MDX | 1 -1 RTN9L | DECR LODP COUNT LOOP-NEW PATTERN | 80911080 | | 0C4B | 0 4218 | | BSI 2 CKLK-TE | | 80911750 80911760 | |
| | 0C20 0 C00F | LD | FSTNO | SET SUMMARY TABLE | 80911090 80911100 | | | 1 0C35 | | DC RT11L | RETURN IF ON | 80911770 | |
| | 0C21 1 6780 0800 0C23 0 73F7 | LDX | | IX EQUAL RTN NUMBER | 80911110 | | 0040 | 0 421E | ا • חם חם ח | BSI 2 CNTLE-1 | B TERMINATE DFT | 80911780 | |
| • | 0024 0 7301 | MDX MDX | 3 - 9 3 1 | SKP IF RTN 9 | 80911120 | | | • | * | | | 80911790 | |
| | OC25 1 D700 0878 | | | INDEX = 2 SAVE FIRST NUMBER USED | 80911130 | | | | * | T E | ST ROUTINE 12-WRITE 400 | 80911810 | |
| | 0C27 0 C007 0C28 1 D700 0879 | ŁD | LSTND | GET LAST NUMBER USED | 80911140 80911150 | - | | | * | | RDS ON CYL 2-SECT O. | 80911820 | |
| | 0C2A 0 421E | STO BSI | L3 LRNI | SAVE | 80911160 | | | | * | | AD AND CK NUMBER OF IRDS WRITTEN-SAVE IN | 80911830 80911840 | |
| | | * D21 | 2 CNTLE-TB | EXIT ROUTINE | 80911170 | 1 | | | * | | MMARY. | 80911850 | |
| | | * | READ (| OR CDMPARE ERROR | 80911180 | 1 | | | * | | STDRE SECTOR 1 IF | 80911860 | |
| | OC2B O D2OC | * | , | | 8091119 0 809 1120 0 | | | | * | | STROYED. TE-SUMMARY VALUE IS THE | 80911870 | |
| | 0C2C 0 4218 | RTN9E STO BSI | 2 RTNER-TB 2 CKLK-TB | SET ERROR SW | 80911210 | | | • | * | AV | ERAGE OF 50 PASSES. | 80911880 80911890 | |
| | 0C2D 1 0C04 | DC | | CK LDCK ON ERROR RETURN IF ON | 80911220 | | | | * | | | 80911900 | |
| | 0C2E 0 421E 0C2F 0 0000 | BSI | 2 CNTLE-TB | EXIT ROUTINE | 80911230 80911240 | | 0C4F | 0 4236 | RTN12 B | 30000000000000000000000000000000000000 | | nnn 80911910 | |
| | 0C30 0 0000 | LSTNO DC FSTND DC | *-* | LAST RANDOM NUMBER | 80911250 | | | 0 0002 | | OC 2 | B SEEK CYL 2 AND VERIFY * THE SEEK | 80911920 | |
| | | *************************************** | *-* | FIRST NUMBER USED | 80911260 | | | 1 0AE1 | C | OC CNTL | EXIT IF ERRDR | 80911930 80911940 | |
| | | * | | | 809112 70 80911280 | | | 0 1010 0 D0E5 | RT12Z S | | CLEAR AVERAGE | 80911950 | |
| | | * | TEST R | CONTINE EFEAEN- | 80911290 | | 0032 | 0 0025 | * | STD AVG | * | 80911960 | |
| | | * | 1 • WR | | 80911300 | | | 0 C00E | RT12L L | -D K370 | SET WORD COUNT | 80911970 80911980 | |
| | | * | CY | | 80911310 | 1 | | 0 1002 | | SLA 2 | CLEAR BIT1 | 11981 | |
| | | * | 2. RE | WRITE CYL 2-SECT 0 | 80911320 80911330 | | | 0 1802 0 D245 | | SRA 2 STO 2 COMA-TB | * 7.1. 1.40. 40.54 | | |
| | | <i>*</i> | MI | TH 1 WDRD OF SECTOR | 80911340 | i i | 0C57 | 0 C2BF | | D 2 H1313-T | | 80911990 80912000 | |
| | | * | | | 80911350 | | 0C58 | 0 422A | | SSI 2 SETV-TB | | 80912010 | |
| | | * | CY | L 2-SECT O. | 80911360 80911370 | | 0059 | 0 1010 | * | SLA 16 | WRITE CM 2 CCCT - | 80912020 | |
| | | * | 4. CK | DATA READ FOR | 80911380 | İ | 0C5A | 0 4239 | | SSI 2 WRITE-T | WRITE CYL 2-SECT O B * WITH NO DSW CHECK | 80912030 1204 0 | |
| | | * | CU DA | | 80911390 | - | 0C5B | 0 C190 | D | | 00+/4000 DON'T PRESET I/O | 12040 | - |
| | × | * | 5. RE | STDRE ORIGINAL DATA | 80911400 80911410 | | 00.50 | 0 0018 | · * K27 O | IC 27 | * AREA DR CK OSW CONSTANT 27 | | |
| | | * | ON | CYL 2-SECT O. | 80911420 | | | 0 403D | | SS1 R12CK | CK OSW | 80912060 809120 70 | |
| | | *000000000 | | | 80911430 | | | | * | | | 80912070 | |
| | 0631 0 4236 | KINTT B21 | 2 VERFY-TB | C C C L | 80911440 80911450 | | | 0 4230 0 5E15 | | SI 2 STMSG-TI | | 80912090 | |
| | 0C32_0 0002 0C33_1 0AE1 | DC DC | 2 | * THE SEEK | 80911460 | | UCSF | - - 7ET3 | _* _* | C /5E15 | MESSAGE ID | 80912100 | |
| | OC34 0 700A | υc B | CNTL I | EXIT ON ERROR | 80911470 | | | 0 1010 | - | LA 16 | READ SECTOR O | 80912110 80912120 | |
| | | * | | | 80911480 80911490 | 1 | | 0 4224 | В | SI 2 READ-TB | READ W/O CKING DSW/DATA | 12130 | 8 |
| | 0C35 0 1010 0C36 0 4239 | RT11L SLA | 16 | WRITE CYL 2-SECT O | 80911490 | Property and services on the services | | 0 4172 0 4037 | K370 D | C 370+/400 SI R12CK | | 12140 | A Committee Committee Committee |
| | 0C37 0 4001 | BSI. | 2 WRITE-TB * | * WITH SECTOR 10 | 80911510 | Contract | 0C64 | 0 4230 | | SI 2 STMSG-TE | CHECK DSW PRINT IF ERROR | 80912150 80912160 | |
| 0 | 0C38_0-0000 | AVG DC | | | 80911520 ¹ 80911530 | | 0065 | 0 5E16 | D | | MESSAGE ID | 80912170 | |
| . 0 | C39 1 OC3A | ОС | | | 80911530 80911540 | | 0066 | 0 6700 0172 | * | DV IS (SEA | CK: NUMBER OF THE | 80912180 | . 7 |
| | | * | | | 80911550 | | | | RT12A -LE | DX L3 370 D L3 COMA | CK NUMBER OF WORDS | 80912190 | * |
| | | | | | : | 1975 | | * | | | | 80912200 | |
| , i | | - · · · · · · · · · · · · · · · · · · · | | | 101 | | 8 | | | | | | |

| INTENANCE DIAGNOSTIC | PROGRAM FOR THE 1800 SYSTEM | 4 | PART ND. 2196378 | IBM MAINTENANCE DIAGNOSTIC | PROGRAM FOR THE 1800 SYSTEM | DART UR CACA |
|---|---|--|--|--|---|--|
| /B FUNCTION TEST | | | PAGE 10 | 2310 A/B FUNCTION TEST | TROOKAN TOK THE TOUG STSTEM | PART ND. 21963 PAGE 1 |
| OC6A O F2BF OC6B 1 4C18 OC6F OC6D O 73FF OC6E O 70F9 | BZ RT12B MOX 3 -1 | * BRANCH IF FDUND OECR WD CDUNT LDDP | 80912210 80912220 80912230 | | * BSI 2 ZRQDV-TB * | 80912890 80912900 80912910 |
| 0C6F 0 6BC0 0C70 1 7780 0C38 0C72 0 6BC5 | * RT12B STX 3 FSTND MDX I3 AVG | SAVE NUMBER OF WDRDS AOD TD TDTAL | 80912240 80912250 80912260 80912270 | OCAC O C2BC OCAD 1 4CA8 08C1 | * RDUTINE TO REQUEST OEVICE * | 80912940 |
| 0C73 0 C2E1 0C74 0 4224 | * LD 2 K1-TB · | SAVE TOTAL READ SECTOR 1 | 80912280 80912290 80912300 | i i i i i i i i i i i i i i i i i i i | BN I ZRQDV EXIT IF DEVICE CONNECTED * REQUEST DEVICE * | 80912950 80912960 80912970 |
| 0C75 0 4001 0C76 0 C246 | DC 1+/4000 LD 2 COMA&1-TB | READ W/D CHECKING WORD CDUNT GET ID READ | 12310 12320 80912330 | OCAF 2 4480 0131 OCB1 1 OCB7 OCB2 1 083B | ZRQDA BSI I REQDV MONITOR CALL DC ZBUSY BUSY RETURN DC DDEFX DDEF+5W FNC 2 | 80912980 80912990 80913000 |
| 0C77 0 F298 0C78 0 F2E1 0C79 1 4C18 0C85 0C78 0 C20C | EOR 2 K1-TB BZ RT12D | CK FDR CDRRECT * BRANCH IF CORRECT | 80912340 80912350 80912360 | 0CB3 1 0826 0CB4 1 080B 0CB5 1 4C80 08C1 | DC DDEFX DDEF+SW FNC 2 DC DVA AODRS DVA OC TERM ADDRS TERMINATOR B I ZRQOV EXIT | 80913010 80913020 80913030 |
| 0C7C 0 D2C7 0C7D 0 401D | STD 2 ZSNS-TB | GET ERROR SW DUMMY ENTRY CK PRINT SW ONLY | 80912370 80912380 80912390 | | * OEVICE BUSY | 80913040 80913050 80913060 |
| 0C7E 0 4230 0C7F 0 5E18 0C80 0 C2E1 | OC /5E18 | PRINT ERRDR MESSAGE IO | 80912400 80912410 80912420 | 0CB7 0 422D 0CB8 0 70F6 | ZBUSY BSI 2 STMLS-TB SET RETURN FRDM MONITOR B ZRQDA * ANO EXIT TO MONITOR * | 80913070 80913080 80913090 |
| 0C81 0 4239 0C82 0 0141 0C83 0 E5E5 | LO 2 K1-TB BSI 2 WRITE-TB C 321 C 7E5E5 RESTORE SECTOR 1 * * | 80912430 80912440 80912450 | | * | 80913110 |
| 0C84 1 0C85 0C85 0 C0AA 0C86 0 D2C7 | DC RT12D (RT120 LD FSTND | # ERRDR RETURN GET CURRENT WO CT | 80912460 80912470 80912480 | | * SUB-ROUTINE XEQ * ********************************** | 80913140 80913150 |
| 0C87 0 92E9 0C88 1 4C28 0C8D 0C8A 0 90D1 | S 2 K331-TB BN RT12G | DUMMY ENTRY SUB 331 BRANCH IF LESS | 80912490 80912500 80912510 | Vi | * * * * * * * * * * * * * | 80913170 80913180 80913190 |
| 0C8B 1 4C08 0C91 0C8D 0 C20C 0C8E 0 400C | BNP RT12F E RT12G LD 2 RTNER-TB (| SUB 27 BRANCH IF LESS THAN 358 GET ERROR SW | 80912520 80912530 80912540 | | * AN XID INSTRUCTION. * IT WILL THEN WAIT FOR AN INTERRUPT, | 80913200 80913210 80913220 |
| 0C8F 0 4230 0C90 0 4E17 0C91 0 C20C | BSI 2 STMSG-TB F DC /4E17 N | CHECK PRT SW DNLY PRINT ERROR MESSAGE ID | 80912550 80912560 80912570 | i. | * LODPING THROUGH THE MONITOR. THE * LOCATION (XCNT) WILL KEEP * THE CURRENT OELAY COUNT FOR A LOST | 80913230 80913240 80913250 |
| 0C92 0 4218 0C93 1 0C51 0C94 0 71FF | BSI 2 CKLK-TB C DC RT12Z F | GET ERROR SW CHECK LOCK ON ERROR RETURN IF ON | 80912580 80912590 80912600 | | * INTERRUPT. * * IF AN INTERRUPT IS LOST AN ERROR | 80913260 80913270 80913280 |
| 0C95 0 70BD 0C96 0 C0A1 0C97 0 1890 | MDX RT12L L LD AVG G | DECR RTN LDOP COUNT DDDP DET TOTAL WORDS | 80912610 80912620 80912630 | | * MESSAGE IS PRINTED AND THE ROUTINE * TERMINATES THE DFT * | 80913290 80913300 80913310 |
| 0C98 0 A812 0C99 0 D2F6 0C9A 0 421E | D NLOOP D STO 2 WRLNG-TB S | SET IN Q DIVIDE BY 50 SET IN SUMMARY EXIT ROUTINE | 80912640 80912650 80912660 80912670 | | **** RDUTINE CALL . * BSI 2 XEQ-TB * IOCC MUST BE PRESET AT LOCATION (ZXIO). | 80913320 80913330 80913340 |
| 0C9B 0 0000 0C9C 0 C2C7 | * R12CK DC | ENTRY SET INTERRUPT DSW | 80912680 80912690 80912700 | OCB9 O C2CA OCBA O EAA7 | XEQE LD 2 ZXID+1-TB GET IOCC | 80913350 80913360 80913370 |
| 0C9D 0 4828 0C9E 0 1007 0C9F 1 4C28 0CA8 | SKP &Z S SLA 7 C BN RCKX B | KIP IF BIT O IS O HECK BIT 7 RANCH IF ON | 80912710 80912720 80912730 | OCBB O D2CA OCBC O D2A6 OCBO O 4242 | DR 2 OVA-TB COMBINE WITH AREA CDDE STD 2 ZXIO&1-TB SAVE STD 2 INTSW-TB SET INTRPT SWITCH | 80913380 80913390 80913400 |
| OCA1 O C2OC OCA2 O 421B OCA3 O 7004 | - BSI 2 CKPRT-TB C MDX RCKX R | ET ERRDR SW HECK PRINT ALL SW ETURN IF DFF | 80912740 80912750 80912760 | OCBE O CAC9 OCBF O DAD3 | | 80913410 80913420 80913430 |
| 0CA4 0 COB7 0CA5 0 D20C 0CA6 1 4C80 0C9B | STO 2 RTNER-TB * RCKX1 BSC I R12CK E | XIT RDUTINE | 80912770 80912780 80912790 | 0CCO 0 0ACB 0CC1 0 D2D1 0CC2 0 E2BE | STD 2 TBOSW-TB SAVE | 80913440 80913450 80913460 |
| OCA8 1 7402 OC9B OCAA 0 70FB OCAB 0 0032 | RCKX MDX L R12CK,2 I MDX RCKX1 G NLODP DC LPCNT L | NCR RETURN TO ND PRINT D EXIT ODP CDUNT | 80912800 80912810 80912820 | OCC3 1 4C18 OCCE | BZ XEQB BRANCH IF OK | 80913470 80913480 80913490 |
| | * SUB-ROUTINE ZRQ | | 80912830 80912840 80912850 | 0CC5 0 4230 0CC6 0 5E03 | * BSI 2 STMSG-TB CALL MSG SETUP RTN | 80913500 80913510 80913520 80913530 |

PROG ID

PAGE

0809-2

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DATE

EC NO. 415233

04NDV66 01DCT67 15FEB68 02DEC68 14NDV69 30JAN70 20MAR70 415233 411875 411913 411961 431319 431319A 431320

PRDG ID

PA GE

0809-2

-10A

04NOV66 01DCT67 15FEB68 02DEC68 14NDV69 30JAN70 20MAR70 415233 411875 411913 411961 431319 431319A 431320

DATE EC NO.

| 18M MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 2310 A/B FUNCTION TEST | PART ND. 2196378 PAGE 11 | 18M MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM PART NO. 2196378 PAGE 11A 2310 A/B FUNCTION TEST |
|--|--|---|
| OCC7 O C2EA LD 2 K10TH-T8 SET LDOP COUNT TO 10,000 OCC8 O 0208 STO 2 ZCNT-T8 * OCC9 O 422D CKRD3 8SI 2 STMLS-T8 SET RETURN AND EXIT * | 80913570 80913580 80913590 80913600 | * |
| * MONITOR RETURNS HERE OCCA 1 74FF 0887 MOX L ZCNT,-1 DECR COUNT OCCC 0 70FC MDX CKR03 LOOP OCCD 0 70F2 MOX CKR01 TEST AGAIN | 80913610 80913620 80913630 80913640 80913650 80913660 | * 80914280 * ROUTINE TO SAVE INDEX REGS 80914290 * AND EXIT TO MONITOR 80914300 * 80914310 **** ROUTINE CALL 80914320 * BSI 2 STMLS-TB 80914330 |
| OCCE 0 C2C5 | 80913670 80913680 80913690 80913700 80913710 80913720 | * 80914340 * |
| OCD2 0 D2D1 STO 2 T8DSW-TB STORE IN CASE PRINT OCD3 0 C245 LD 2 CDMA-T8 IF ZERO DDN'T CHECK FOR OCD4 1 4C18 OCD0 8Z XEQLP * BUSY AND NDT READY OCD6 0 C2D1 LD 2 T8DSW-TB GET DSW JUST SENSED OCD7 0 E28E ANO 2 H3000-TB SAVE BITS 2-3 OCD8 0 F2BE EDR 2 H3000-T8 COMPLEMENT THEM FOR TEST OCD9 1 4C18 OCD0 BZ XEQLP 8RANCH IF OK | 80913720 80913740 80913750 80913760 80913770 80913780 80913790 | OCFA 2 4C80 0120 8SC I START EXIT TO MONITOR THRU START 80914400 * 80914410 * MONITOR RETURNS HERE 80914420 * 80914430 OCFC 1 6600 087F STMLR LDX L2 T8 RESTORE INDEX REGS 80914440 OCFE 0 6500 0000 LDX L1 *-* * 80914450 OD00 1 4C80 08AC 8 I STMLS EXIT VIA ENTRANCE 80914460 |
| OCDB 0 4230 OCDC 0 0E04 BSI 2 STMSG-TB NOT READY ERROR MSG OCDC 0 0E04 C | 80913800 80913810 80913820 80913830 80913840 | ODO2 1 OCFC STML DC STMLR ADRS DF RETURN 80914470 * 80914480 * |
| OCOO 0 422D * XEQLP BSI 2 STMLS-T8 SET MLSCF ENTRY AND EXIT * MDNITDR RETURNS HERE | 80913850 80913860 80913870 80913880 80913890 | * 80914520 * SU8-ROUTINE VERFY 80914530 * 80914540 ************************************ |
| OCDE 0 C2A6 OCDF 1 4C18 OCE8 BZ XEQX BRANCH IF OFF OCE1 1 74FF 0887 MDX L ZCNT,-1 DECR LOOP COUNT OCE3 0 70F9 B XEQLP 8RANCH IF NOT ZERO | 80913900 80913910 80913920 80913930 80913940 | * TO LOCATE DESIREO CYLINDER. THE CORRECT 80914570 * CYLINDER IS VERIFIED BY READING AS MANY 80914580 * AS ALL EIGHT SECTOR ID'S IF COMPARE ERRORS 80914590 * OCCUR. 80914600 * 80914610 |
| OCE4 0 4230 8SI 2 STMSG-T8 PRINT LDST INTRPT OCE5 0 0E01 OCE6 0 423F OCE7 0 4233 8SI 2 STMSG-T8 PRINT LDST INTRPT MESSAGE ID OCE6 0 423F 8SI 2 ZRLDV-T8 LOST INTRPT-REL DEV. BSI 2 TEXIT-TB TERMINATE OFT | 80913950 80913960 80913970 80913980 80913990 | # IF TWO (2) CORRECT CYLINDER ID'S ARE READ, 80914620 # THE 'PRESENT CYLINDER' WORD (PCYL#) IS 80914630 # UPDATED AND THE RDUTINE IS EXITED. 80914640 # 1F EIGHT DSW READ ERRORS OR SECTDR 80914660 |
| OCE8 0 423F XEQX BSI 2 ZRLDV-TB RELEASE DEVICE OCE9 0 4220 BSI 2 STMLS-TB LODP THRU MONITDR OCEA 0 C2C7 LD 2 ZSNS-TB GET INTRPT DSW OCEB 0 D2D1 STD 2 T8DSW-TB STDRE FOR PRINT OCEC 1 4C80 088B 8 I XEQ EXIT | 80914000 80914001 80914010 80914020 80914030 | * ID ERRORS DCCUR, THE DFT IS TERMINATEO. 80914670 * 80914680 * IF NEITHER OF THE ABDVE OCCUR, A TEST IS 80914690 * MADE FDR ANY FIVE (5) CYLINDER ID'S JUST READ 80914700 * READ 8EING THE SAME. IF SD, THIS CYLINDER 80914710 * IS ASSUMED TO BE THE PRESENT CYLINDER AND 80914720 * UP TO SEVEN RETRIES ARE MADE FOR THE COR- 80914730 |
| ***** ROUTINE CALL | 80914060 80914070 80914080 80914090 80914100 | * RECT CYLINGER. 80914740 * 80914750 ***** ROUTINE CALL 80914760 * 80914770 * 8SI 2 VERFY-TB 80914780 |
| * 8SI 2 ZRLDV-TB * ** ** ** ** ** ** ** ** ** ** ** ** | 80914110 80914120 80914130 80914140 80914150 | # DC CYL # DESIRED 80914790 # DC ADDRS DF ADDRESS ERRDR RETURN 80914800 # |
| * RELEASE QEVICE ** OCF1 2 4480 0132 BSI I RELDV RELEASE DEVICE OCF3 1 0838 OC DDEFX DDEF+SW FNC 2 OCF4 1 080B - DC TERM ADORS OF TERMINATOR | 80914160 80914170 80914180 80914190 80914200 80914210 | 0D04 0 0209 STO 2 RTCNT-TB * 80914840 0005 0 020A STO 2 WRRTY-TB SET RETRY COUNTER 80914850 0D06 1 6D00 0DC2 STX L1 VERFX&1 SAVE INDEX 1 80914860 0D08 1 6780 0885 LDX I3 VERFY GET CALLING AORS+1 80914870 000A 0 C301 LD 3 1 GET CONTENTS OF CALL+2 80914880 0D08 0 001B STD TSTCF+1 SET FOR EXIT 80914890 |
| | 80914220 80914230 | 000E 0 C300 LD 3 0 GET CYL. DESIRED 80914910 |
| DATE 04NOV66 010CT67 15FEB68 02DEC68 14NOV69 30JAN70 20MAR70 EC NO. 415233 411875 411913 411961 431319 431319A 431320 | PROG ID 0809-2 PAGE 11 | DATE 04NOV66 010CT67 15FEB68 02DEC68 14NOV69 30JAN70 20MAR70 PROG ID 0809-2 - EC NO. 415233 411875 411913 411961 431319 431319A 431320 PAGE 11A |

| | PRDGRAM FOR THE 1800 SYST | EM | PART NO. 2196378 | IBM MAINTENANCE DIAGNDSTIC | PRDGRAM FOR THE 1800 SYSTEM | PART NO. 2196378 |
|--|--|---|------------------------------------|--|--|----------------------------------|
| A/B FUNCTION TEST | | · | PAGE 12 | 2310 A/B FUNCTION TEST | | PAGE 12A |
| 000F 0 D20A 0010 0 6303 | STO 2 NCYL#-TB LOX 3 3 | SAVE COUNTER | 80914920 80914930 | 0038 0 0245 0039 0 1890 | STO 2 COMA-TB SET CK-NDT-ROY SW SRT 16 * TO Q REG. | 80915600 80915610 |
| 0011 0 C20A 0012 1 F700 081E | VERFA LO 2 NCYL#-TB EOR L3 BADCY-1 | GET DESIRED CYL. CMP WITH BAD CYLS | 80914940 80914950 80914960 | | TEST FOR FAST OR SLDW ACCESS | 80915620 15630 |
| 0D14 1 4C18 0026 0016 0 73FF 0017 0 70F9 | BZ TSTCF MOX 31 B VERFA | BRANCH IF CMP OECR COUNT LOOP | 80914970 80914980 | 0D3A 0 C20E 0D3B 1 4C20 0O49 | LD 2 MDDEL-TB NON-ZERD = FAST ACCESS BNZ SEEKC BRANCH IF NOT ZERO | 80915640 15650 80915660 |
| 0018 1 6780 0859 | * LDX I3 NCYL# | CYL DESIRED TO IX1 | 80914990 80915000 80915010 | ~ | * SLOW ACCESS | 80915670 15680 80915690 |
| 001A 0 73FD 001B 0 7005 | MDX 3 -3 B TSTCB | TEST FOR 0-3 BR4 | 80915020 80915030 80915040 | 0030 0 C20A 003E 0 9209 0D3F 1 4C18 0079 | LO 2 NCYL#-TB CYL. OESIRED TO A S 2 PCYL#-TB SUBTRACT PRESENT CYL. # BZ VERFB BR IF ZERO | 80915700 80915710 80915720 |
| 0D1C 1 C700 0818 001E 0 1803 | TSTCA LD L3 CY000+3 SRA 3 | EOITTEO CYL RIGHT-JUSTIFY | 80915040 80915050 80915060 | 0D41 1 4C28 0D46 0D43 0 1883 | BN SEEKB BRANCH DN MDVE TDWARO HO SRT 3 ZERD BIT 13 IN Q REG. TO | ME 80915730 |
| 0D1F 0 D2DA 0020 0 700F | STO 2 NCYL#-TB B SEEK | SET FDR CALL SEEK CYL. | 80915070 80915080 80915090 | 0D44 0 1083 0D45 0 7004 | SLT 3 * INDICATE MOVE ARM IN B SEEKO * | 80915750 80915760 80915770 |
| 0021 0 73AA 0022 0 7001 0023 0 700C | TSTCB MOX 3 -86 B TSTCC B SEEK | TEST FOR 4-89 90 4-89 | 80915100 80915110 80915120 | 0046 0 F28C 0D47 0 82E1 0D48 0 7001 | SEEKB EOR 2 TERM-TB FORM TWD'S CDMPLEMENT A 2 K1-TB * DF # DF CYL. MDVEMENT B SEEKD * | 80915780 |
| 0024 0 73EB 0025 0 7002 | TSTCC MDX 3 -21 B TSTCO | TEST FOR 90-110 | 80915130 80915140 80915150 | 0049 0 C2DA | * SEEKC LO 2 NCYL#-TB CYL. OESIREO TO A * | 80915810 80915820 80915830 |
| 0026 0 4C00 0000 0D28 0 73A8 | TSTCF B L *-* * TSTCO MDX 3 -88 | 90-110 TAKE AORS ERR EXIT TEST FDR 111-198 | 80915160 80915170 | 0D4A 0 0AC9 0D4B 0 0A03 004C 0 423C | SEEKD STD 2 ZXIO-TB SET IOCC FDR XEQ CALL STD 2 MDO3-TB * BSI 2 XEQ-TB CALL EXECUTE I/O | 80915840 80915850 |
| 0029 0 7001 002A 0 7005 | B TSTCE B SEEK | 199 SEEK CYL | 80915180 80915190 80915200 | 0040 0 4230 | BSI 2 XEQ-TB CALL EXECUTE I/O * * CHECK OSW FOR ERROR | 80915860 80915870 80915880 |
| 002B 0 73FC 002C 0 70F9 | TSTCE MOX 3 -4 B TSTCF | TEST FOR 199-202 GREATER THAN 202 | 80915210 80915220 80915230 | 0D4D 0 100A 0O4E 1 4C28 0O5B | * SLA 10 CHECK FDR SEEK ERROR BN SEEKF BRANCH ON ERROR | 80915890 80915900 80915910 |
| 0020 0 7304 002E 0 1000 0D2F 0 70EC | MOX 3 4 NOP B TSTCA | CREATE POINTER TO CYOOO FDR SKIP GET EDITTEO ENTRY | 80915240 80915250 | | * CHECK FOR PREVIOUS ERROR(S) | 80915920 80915930 |
| | * * | | 80915260 80915270 - 80915280 | 0D50 0 C20B 0D51 0 0203 | LD 2 ERSK1-TB GET ERRDR SWITCH STO 2 MOO3-TB STORE FOR PRINT | 80915940 80915950 80915960 |
| | | E WILL ISSUE THE NO, CHECK THE OSW | 80915290 80915300 | 0D52 1 4C18 0079 0D54 0 4218 | BZ VERFB BR IF NO ERROR BSI 2 CKLK-TB CHECK LDCK-ON-ERROR OPTI | 80915970 DN 80915980 |
| | * FDR ANY ERRORS | . CHECK THE OZM | 80915310 80915320 80915330 | 0055 1 0037 0056 0 4230 0057 0 4401 | DC SEEKA BRANCH IF SET BSI 2 STMSG-TB RECOVEREO ERROR OC /4A01 MESSAGE IO | 80915990 80916000 80916010 |
| | * BE MADE ON OSW | EIGHT RETRIES WILL ERRDRS. IF THERE INCOMPLETE ERRORS. | 80915340 80915350 80915360 | 0D58 0 6303 0D59 0 4221 0D5A 0 701E | LDX 3 SFTSK-SUMRY POINTER BSI 2 COUNT-TB INCR SOFT SEEK ERROR B VERFB NOT SET/ NDRMAL EXIT | 80916020 80916030 80916040 |
| | | M IS TERMINATED TO PREVENT | 80915370 80915380 | | * * FDUND DSW ERRDR | 80916050 80916060 |
| | * THE LDCK-DN-ER * LOCK THE POUT | ROR OPTION WILL NE IN THE SEEK SUB- | 80915390 80915400 80915410 | 005B 1 7401 085A | * SEEKF MOX L ERSK1,1 SET ERROR SWITCH * | 80916070 80916080 |
| | * ROUTINE FOR OS | W ERRORS DTHER THAN E AS LONG AS THE | 80915420 80915430 | | * GET PRESENT OSW * | 80916090 80916100 80916110 |
| | * SWITCH IS ON, * IS INTERMITTEN | EVEN IF THE ERROR T. | 80915440 80915450 | 005D 0 0ACB 0D5E 0 100A | XID 2 SNXID-TB SENSE DSW SLA 10 HAS SEEK ERROR BEEN RESE | 80916120 F 80916130 |
| | * | | 80915460 - 80915470 80915480 | 005F 1 4C28 0070 | BN SEEKG * BRANCH IF NO * * INVALIO AOORESS OSW ERROR | 80916140 80916150 80916160 |
| 0030 0 1010 0031 0 020B | SEEK SLA 16 STO 2 ERSK1-TB | ZERO A REG. CLEAR ERROR CDUNTERS | 80915490 80915500 | 0061 0 4230 | * BSI 2 STMSG-TB PRINT INVALID ADDRS ERROR | 80916170 |
| 0032 0 C2E6 0033 0 D2F0 0034 0 02DC | LO 2 K8-TB STO 2 CNTA-TB STO 2 CNTB-TB | PRESET RETRY CTRS * INVALIO ADDRESS ERROR * SEEK INCOMPLETE ERROR | 80915510 80915520 80915530 | 0062 0 0E05 0063 0 C20B 0064 0 4218 | OC /0E05 MESSAGE IO LD 2 ERSK1-TB GET ERROR SWITCH BSI 2 CKLK-TB CHECK LOCK-ON-ERROR DPTIC | 80916190 80916200 |
| 0035 0 6302 0036 0 4221 | LOX 3 SKCNT-SUMR | | 80915540 80915550 | 0065 1 0D37 0066 1 74FF 087C | OC SEEKA BRANCH IF SET MOX L CNTA,-1 DECREMENT RETRY CNTR A | 80916220 80916230 |
| | * GET IOCC FOR MOVE- | ARM-OUT | 80915560 80915570 80915580 | 0068 0 70CE | MOX SEEKA NOT EIGHT RETRIES YET * OSW ERROR EXIT | 80916240 80916250 80916260 |

415233 411875 411913 411961 431319 431319A 431320

| Code | | STIC PRDGRAM FOR | THE 1800 SYSTE | EM *- | PART NO PAGE | . 2196378 IBM - 13 | MAINTENANCE DI | IAGNOSTIC P | PROGRAM FOR | THE 1800 SYS | TEM | | PART NO | 0. 2196378 13A |
|--|---|------------------|-----------------|---------------------------|-----------------|--|--|-------------|-------------|----------------|-----------------------|------------|-------------------|--|
| Company Comp | 310 A/B FUNCTION TES | •Z. | | • | : | 231 | A/B FUNCTION | TEST | | | | | | |
| 000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | | | | | | |
| Compare Comp | | | | · · | | | 009F 1 40 | 18 0089 | * | VEKFI | BRANCH IF YES | | | |
| Section Sect | | | | | | | | | * | CYL | INDER ID NOT AS EXPEC | | | |
| ## SEEN INCOMPLETE ESSEN 120 NEW-SOUTH ## SOUTH | | | | | | | | | BSI | 2 STMSG-TB | PRINT MESSAGE | | | |
| # SEEK INCOMPLETE STREET 1200 NS DNE-SHOTT 60015700 0070 0 4270 5080 051 2 21740-78 1861 1200 NS DNE-SHOTT 60015700 0070 0 4270 6080 051 2 21740-78 1861 1200 NS DNE-SHOTT 60015700 0070 0 4271 6180 051 2 21740-78 1861 1200 NS DNE-SHOTT 60015700 0070 0 4271 6180 051 2 21740-78 1861 1200 NS DNE-SHOTT 60015700 0070 0 4271 6181 1200 NS DNE-SHOTT 60015700 0070 0 4400 NS DNE-SHOTT 60015700 0D6F 0 421E | BSI | 2 CNTLE-TB | EXIT RDUTINE | | | | | | | | | | |
| 0070 0 A230 | | * SEE | K INCOMPLETE ER | RRDR (200 MS ONE-SHOT) | 80916360 | | ODA4 0 42 | 221 | BSI | | | | _ | |
| 0071 0 0407 071 0 0407 071 0 0407 071 0 0407 071 0 0407 071 0 0407 071 0 0407 071 0 0407 071 0 0407 071 0 0407 071 0 0407 071 0 0407 071 0 0407 071 0 0407 071 0 0407 071 0 0407 071 0 0407 071 0 0407 | 0D70 0 4230 | * SEEKG BSI | 2 STMSG-TR | SEEK INCOMPLETE ERRORIOSW | | | | | MDX R | | | | | |
| 0074 0 7002 | OD71 0 0E07 | DC | /0E07 | MESSAGE ID | 80916390 | | 0021 0 10 | 300 | * | | | . 8 | 0917070 | |
| 0077 0 -0304 | | 85B MDX | | - | | | | | * | UNA | BLE TO REACH DESIRED | | | |
| 0077 0 4233 | 0D75 0 6304 | | 3 HRDSK-SUMR | RY COUNT HARD SEEK ERROR | 80916420 | - 1 | | | | | SET LODP CDUNTER | | _ | |
| 0.00 | | | | | | | | | | | SET HARD ERROR MSG | | | |
| 0.83 0 0 0.00 | | * | | | 80916450 | . 1 | ODAC 1 CD | 000 0A37 | LDD | L1 BDCYL&7 | ÷ | | | |
| 0430 0 0 001 0 005 | | * | | • | | 98 | | | | | * DECR CTR | | | |
| ## READ EIGHT SECTION IOS 8001-500 | 0430 0 | * | ENDCH 0 | 11050 TH MEREY ON M | 80916480 | 1 | ODBO 0 70 | 005 | - | VERFH | BRANCH | 8 | 0917160 | |
| # RED EIGHT SECTOR IDS | UASU U | * * | ENUCM-8 | OSED IN AEKLA DULA | | | | | | | = - | PID,MID | | |
| ### SECTOR FOINTER ### S0016540 | | * | 2542 | CICUT SECTOR IOS | 80916510 | | | | | 3 HRDSK-SUM | ARY COUNT HARD SEE | | 0917190 | |
| 0379 0 5168 VERFE DX 1 -8 SET LIDOP COUNTER 00916550 OBS 0 860 | | * | KEAU | EIGHT SECTOR TOS | | | | | | | | | | |
| 007A 0 69FD | | | | | | | | | | | | | | |
| 007C 0 \$225 | - - | | | | | | | | | | | | | |
| 0070 0 4224 | | | | | | 1 | | | * | DEAC | . NED BOOKE (N. 1805) | | | |
| 007F 0 C246 | 0D7D 0 4224 | | | | | | | | * | | | | | |
| 0080 1 0500 0A38 | _ | | | | | | ODBO O CO | 204 | * | 2 MDOTV_TD | CK BUENTONE CODODE | | | |
| ODB3 0 70F6 B | 0D80 1 D500 | A3B STD | L1 BDCYL&8 | SAVE | 80916620 | | 0DBA 0 92 | 2E6 | S S | | * | | | |
| * CHECK FDR ALL 8 CYLINDER 10S 80916650 | = - = | MDX R | | | | | | | | | | | | |
| # THE SAME 80916-70 D084 0 61F9 | 0000 0 1010 | * | | | 80916650 | 1 | ODBE 1 OD | 30 | | | | | | |
| * | | * | | | | - 4 | | | | | | | | |
| ODBS 1 C400 0A30 VERF0 LD L BOCYLL CK FOR ALL SAME CYLINDER 80916700 | | · · | | | 80916680 | | | | | | | 8 | 0917360 | |
| ODE | | | | | | | | | * | CHEC | K HUME BIT EUD EYDEC | | | |
| OBBA 1 4C20 ODCF | OD87 1 F500 | A38 EOR | L1 BDCYL&8 | * | 80916710 | | | | * | | | 8 | 0917390 | |
| 008C 0 7101 MOX 1 1 0 CECR LOOP CTR 80916740 00C5 0 4820 SKP Z SKIP IF CYL ZERO 80917420 00B0 0 70F7 B VERFO LOOP 80916750 00C6 0 C28C LO 2 TERM-TB MAKE HOME BIT ZERO 8091740 00C7 0 F2C7 EDR 2 ZSINS-TB * 8091740 * 80916750 00C6 0 C28C LO 2 TERM-TB MAKE HOME BIT ZERO 8091740 00C7 0 F2C7 EDR 2 ZSINS-TB * 8091740 * 8091740 00C8 0 1004 SLA 4 CHECK HOME BIT 8091740 00C8 0 1004 SLA 4 CHECK HOME BIT 8091740 00C8 0 1004 SLA 4 CHECK HOME BIT 8091740 00C8 0 1004 SLA 4 CHECK HOME BIT 8091740 00C8 0 1004 SLA 4 CHECK HOME BIT 8091740 00C8 0 1004 SLA 4 CHECK HOME BIT 8091740 00C8 0 1004 SLA 4 CHECK HOME BIT 8091740 00C8 0 1004 SLA 4 CHECK HOME BIT 8091740 00C8 0 1004 SLA 4 CHECK HOME BIT ROUTINE 8091740 00C8 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C8 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C8 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME 8091750 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME 8091750 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT 8091740 00C6 0 4230 BSI 2 STRNSG-TB PRINT HOME BIT INCORRECT BOOT TRANSGE 8091750 00C6 0 4230 BSI 2 ST | | | | * BRANCH IF NOT | | | | | | | | | | |
| * CHECK SECTDRS FOR SEQUENTIAL 80916760 ** CHECK SECTDRS FOR SEQUENTIAL 80916770 ** CHECK SECTDRS FOR SEQUENTIAL 80916780 ** ODC9 1 4C48 0885 ** ODC6 0 4230 ** BS1 2 STMSG-TB PRINT HOME BIT INCORRECT 80917470 ** ODC0 0 4230 ** ODC0 | 0D8C 0 7101 | | 1 1 | DECR LOOP CTR | 80916740 | | 0DC5 0 48 | 320 | SKP | Z | SKIP IF CYL ZERO | 8 | 0917420 | |
| # CHECK SECTORS FOR SEQUENTIAL 80916770 0D8 0 618 | 0080 0 7047 | * | VERFU | C00P | | | | | | | | | | |
| OBSE 0 61F8 | | * | CHECK | SECTORS FOR SEQUENTIAL | 80916770 | | | | | 4 | | 8 | 0917450 | <u> </u> |
| OBSF 0 69E8 VERFE STX 1 TMPX | 0D8E 0 61F8 | * LDX | 1 -8 | SET LODP CTR | | | | | | - | | | | |
| OD92 0 F0E5 | | | | | 80916800 | | | | | | MESSAGE ID | 8 | 0917480 | - |
| OD93 0 E2E5 | | | | · | | | 0000 1 40 | .00 000 | * | 1 VERF1 | EXII KUUTINE | | | • |
| 0D96 0 7101 | _ | | | * PRANCH ON ERROR | | | | - | * | SECT | OR IDS ARE NOT SEQUE | NTIAL 8 | 0917510 | |
| * CHECK FOR EXPECTED CYLINDER 80916870 | OD96 0 7101 | MDX | 1 1 | DECR LODP CTR . | 80916850 | | | | | | | . 8 | | |
| * CHECK FOR EXPECTED CYLINDER 80916880 | 0097 0 70F7 | ' B * | VERFE | LUDP | · | | | | . » B R | | | | | |
| OD98 0 CAD9 | <u> </u> | * | CHECK | FOR EXPECTED CYLINDER | 80916880 | | | | * | | | 8 | 0917560 | |
| 0D99 0 DAO3 | 0D98 0 CAD9 | LDD | 2 PCYL#-TB | SET PRINT MESSAGE | t ve (et) | t taken geoffer per regulations, it and taken to be a results. | and the second of the second o | | *000000000 | | | | | e procedo mas agrees en la la la la la la la la la la la la la |
| OD9B 0 1883 SRT 3 * 80916930 * 80917610 * 0D9C 0 D2D5 STO 2 MOD5-TB SAVE FOR PRINT 80916940 * ********************************** | a contract of the contract of | STD | 2 MOD3-TB | * | 80916910 | | | 1 | * | | | - 86 | 09 17590 · | |
| 0D9C 0 D2D5 | | | | | | | | | * | . READ | SUB-ROUTINE | | | |
| AND A DEAD A DEAD STATE SEL 82 SEL 82 SKESENI CLETINDEK SAA10ADA. | | STO | 2 MOD5-TB | | 80916940 | | | | *000000000 | 10000000000000 | 00000000000000000000 | 8 00000000 | 0917620 | |
| | 0 | STO | Z PUYL#-IB | SEI AS PRESENT CYLINDER | 90710750 | | | | • | - 0 - | | 8(| U91 76 30 | |

| | * | * THIS ROUT | TINE WILL ISSUE THE + | 80917640 | [| * | ***** | | |
|----------------------------|--|--------------------------|--|---------------------------------------|--------------------------------------|----------------|-----------------------|--|-------------------------------|
| | * | | RATION, CHECK THE DSW | 80917650 | | * | 155UE THRII | E A READ OPERATION THE XEQ SUB-ROUTINE | 80918380 |
| | * | | RS AND CALL THE | 80917660 | F | * | THE | THE YEA SOR-KROLINE | 80918390 |
| | * | | SUB-ROUTINE TO CHECK | 80917670 | ODF3 0 423C | BS 1 | I 2 XEQ-TB | ISSUE READ COMMAND | 80918400 80918410 |
| | * | FOR ANY E | .KKUKS• | 80917680 80917690 | | * | NOCK NEG TOUR | | 80918420 |
| | * | A MAXIMUM | 4 OF EIGHT RETRYS WILL | 80917700 | | # NC L | NOCK NEG DONT C | CHECK FOR | 80918430 |
| | * | BE MADE O | ON BOTH A DSW OR A | 80917710 | | * | I EVKOK2 + BOL EX | KIT AS IF NORMAL READ. | 80918440 |
| | * | COMPARE E | ;RROR• | 80917720 | ODF4 O C2FF | LD | 2 NOCK-TB | GET NO CHECK SWITCH | 80918450 80918460 |
| | * | THE LOCK | ON ERROR OPTION WILL | 8091773D | ODF5 1 4C28 0E09 | BN | RDNCK | EXIT IF MEGATIVE | 80918470 |
| | * | | ROUTINE IN THE READ | 80917740 80917750 | | * | CHECK | | 80918480 |
| | * | | LONG AS THE SWITCH | 80917760 | į. | * | CHECK | DSW FOR ERRORS | 80918490 |
| | * | | N IF THE ERROR IS | 80917770 | 0DF7 0 C2C7 | LD | 2 ZSNS-TB | INTRPT DSW | 80918500 80918510 |
| | * | INTERMITT | ENT. | 80917780 | ODF8 1 4C28 0E16 | | RDER2 | BRANCH ON ERROR | 80918520 |
| | **** ROUTI | NE CALL | | 8091 7790 8091 7 800 | DFA 0 4039 ODFB 0 700F | BS I B | • | CALL COMPARE RTN | 80918530 |
| | * | TE ONCE | | 80917810 | ODFC O CADE | Lon | RDER1 2 RDDSW-TB | COMPARE ERROR RETURN GET ERROR COUNTS | 80918540 |
| | | SECTOR COUNT | | 80917820 | ODFD O DAD3 | STD | | STORE IN CASE PRINT | 80918550 |
| | * BSI | 2 READ-TB | NO OF HOOGE TO BE 2542 | 80917830 | ODFE 0 82E0 | A | 2 RDCMP-TB | ADD COMPARE ERRORS | 80918560 809185 7 0 |
| | * DC | WDCNT | NO. OF WORDS TO BE READ # BIT O EQUAL 1 MEANS USE | 80917840 | ODFF 1 4C18 0E07 0E01 0 4218 | BZ | READX | BRANCH IF NO ERRORS | 80918580 |
| | * | | | 80917850 80917860 | 0E01 0 4218 0E02 1 0DEF | BS I | | CHECK LOCK ON ERROR SW | 80918590 |
| | * | | * 8IT 1 EQUAL 1 MEANS TO | 17861 | 0E03 0 6306 | DC LDX | READA 3 SFTRD-SUMR | IF SET Y POINTER | 80918600 |
| | * | | * READ AND RETURN WITHOUT | | 0E04 0 4221 | BSI | | SOFT READ ERROR | 80918610 |
| | * * DC | NUMBER | * CHECKING THE DSW OR DATA | | 0E05 0 4230 | BSI | | PRINT MESSAGE | 80918620 80918630 |
| | * DC | CMPERR | USED IN COMPARE ADRS OF CMP ERROR RETURN | 80917870 80917880 | 0E06 0 3A02 | DC | /3A02 | FORM NO./MID | 80918640 |
| | * | J. 2111 | ABINO OF THE ENGLISH REPORT | 80917890 | 0E07 1 7402 08A3 | ∓ READX MDX | L READ,2 | TAICO FOR MERCHANIST | 80918650 |
| | * | | | 80917990 | 1 2 7 102 3073 | * | L KEAU+Z | INCR FOR NORMAL RETURN | 80918660 |
| ODD3 O EAC3 | RDEN OR | 2 DSK₩D-TB | COMBINE WITH READ | 80918000 | 0E09 1 4C80 08A3 | RDNCK B | I READ | RETURN | 80918670 80918680 |
| 0DD4 0 1890 0DD5 0 D2DF | SRT STO | 16 3 800004 TB | A TO Q | 80918010 | 0500 1 7/01 055 | * | | | 80918690 |
| 0DD6 0 D2E0 | STO | 2 RDDSW-TB 2 RDCMP-TB | CLEAR DSW ERROR COUNTER CLEAR CMP ERROR COUNTER | 80918020 80918030 | 0E0B 1 7401 085F 0E0D 1 74FF 085C | RDER1 MDX | | COUNT COMPARE ERROR | 80918700 |
| 0DD7 0 C215 | LD | 2 ADCMA-TB | SECRIC SIN ENGAN SOUTEN | 80918040 | 0E0F 0 70E1 | MUX R | L RTRYA,-1 READB | DECR RETRY COUNTER | 80918710 |
| ODD8 O DAC9 | STD | 2 ZXIO-TB | | 80918050 | OE10 O CADE | LDD | | LOOP GET ERROR COUNTERS | 80918720 |
| 0DD9 0 108D | SLT | 13 | SECTOR TO 0-2 Q REG. | 80918060 | 0E11 0 DAD3 | STD | | STORE FOR PRINT | 80918730 80918740 |
| ODDA O C2DA | LD * | 2 NCYL#-TB | GET CYL. # WHERE DISK S/B * AFTER LAST SEEK | 80918070 | 0E12 0 4230 | BSI | 2 STMSG-TB | PRINT MESSAGE | 80918750 |
| ODDB 0 1083 | SLT | 3 | | 80918080 80918090 | 0E13 0 3A05 0E14 0 4C00 0000 | DC DC | /3A05 | FORM NO./MID | 80918760 |
| ODDC 0 D206 | STO | 2 IDS≠B-TB | PRESENT SECTOR ID | 80918100 | 3227 3 1888 8888 | * * | L *-* | COMPARE ERROR EXIT | 80918770 |
| | * | | | 80918110 | 0E16 0 C2DF | RDER2 LD | 2 RDDSW-TB | GET DSW ERROR COUNT | 80918780 |
| 0DDD 1 6780 08A3 | * | 12 0540 | CET CALLING ADDELL | 80918120 | 0E17 1 7401 085E | | L RDDSW,1 | BUMP COUNT | 80918790 80918800 |
| ODDF 0 C300 | LDX LD | I3 READ 3 O | GET CALLING ADRS+1 GET WORD COUNT | 80918130 80918160 | 0E19 0 421B 0E1A 0 7002 | BSI | 2 CKPRT-TB | CK PRINT-ALL-ERRORS OPTION | 80918810 |
| ODEO O D2FE | STO | 2 RNOCK-TB | IF NEG. USE RANDOM NUMBERS | | 0E1B 0 4230 | B 851 | KUKZB | 8R AROUND PRINT | 80918820 |
| ODE1 0 1001 | SLA | 1 | CLEAR BIT O/BIT 1 SET | 18171 | 0E1C 0 5E09 | DC | | PRINT ERROR MESSAGE MESSAGE ID | 80918830 |
| ODE2 0 D2FF | STO | 2 NOCK-TB | * MEANS DON'T CHECK FOR ER | | 0E1D 0 4016 | RDR2B BSI | | CALL COMPARE RTN | 80918840 80918850 |
| DDE3 0 1001 ODE4 0 1802 | SLA SRA | 2 | CLEAR BIT 1 | 18180 | 0E1E 0 700F 0E1F 1 74FF 085C | В | RDER4 | COMPARE ERROR RETURN | 80918860 |
| ODE5 0 D245 | STO | 2 COMA-TB | WORD COUNT | 80918200 | 0E21 0 70CF | MDX | L RTRYA 1 | DECR RETRY COUNTER | 80918870 |
| ODE6 0 D200 | STO | 2 LNGTH-TB | * FOR COMPARE RTN | 80918210 | VIII 0 1001 | * | READB | LOOP | 80918880 |
| ODE7 0 C301 | LD | 3 1 | GET NUMBER | 80918220 | OE22 D CADF | RDER3 LDD | 2 RDDSW-TB | GET ERROR COUNTERS | 80918890 |
| ODE8 0 D2DD ODE9 0 C302 | STO | | * FOR COMPARE RTN | 80918230 | 0E23 0 DAD3 | STD | 2 MOD3-T8 | CTOOL THE CLOSE | 80918900 80918910 |
| ODEA O DOZA | LD STO | 3 2 RDSPX+1 | GET CMP ERROR ADRS SET FOR CMP ERROR EXIT | 80918240 80918250 | 0E24 0 4218 0E25 1 0DEF | BSI | 2 CKLK-TB | CHECK LOCK-ON-ERROR | 80918920 |
| ODEB 1 7401 08A3 | | L READ.1 | INCR FOR NO-CHECK RETURN | 80918260 | 0E26 0 4230 | DC BS I | READA | IF SET | 80918930 |
| ODED 0 6305 | LDX | | | 80918270 | 0E27 0 3E0A | DC | | | 80918940 |
| ODEE 0 4221 | BSI | 2 COUNT-TB | INCR READ COUNT | 80918280 | 0E28 D 63D7 | LDX | 3 HRDRD-SUMRY | | 80918950 |
| ODEF D CAE6 | * | 2 40 TO | | 80918290 | 0E29 D 4221 | BSI | 2 COUNT-TB | 11400 DE LO BODO- | 8D918960 8D91897D |
| ODFO D DADD | READA LDD STD | 2 K8-TB 2 RTRYA-TB | | 80918300 8091831D | DE2A D C2DD 0E2B 1 4C18 0E07 | LD | 2 RTRYA-TB | GET DSW RETRY COUNTER | 80918980 |
| | * | 2 11111111111 | | 80918320 | - 0220 1 4010 0201 | BZ * | READX | | 80918990 |
| | * | PRESE | | 8091833D | DE2D D 7DE6 | . В | | TAVE CHO EDDO | 8D919D00 |
| 0051 0 0000 | * | | | 80918340 | 0505 0 500 | * | | | 80919010 80919D20 |
| ODF1 D C28C ODF2 D 422A | READB LD | 2 TERM-TB 2 SETV-TB | /FFF | 8091835D | 0E2E 1 7401 085F 0E30 1 74FF 085D | RDER4 MDX | | INCR CMP ERROR COUNT | 80919D3D |
| 00F2 D 42ZA | * 521 | 2 3514-10 | | 8091836D 8091837D | DE32 D 70BE | | | DECR CMP ERROR COUNT | 80919040 |
| | | | | 00710310 | 3232 3 70BC | В | READB L | LOOP | 8D919D5D |
| | | | | | | | | | · . |
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DATE

EC NO.

PROG ID

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2310 A/B FUNCTION TEST

| | 0533 0 7055 | | | | | | | |
|---|---|---|------------|------|---------------------|--|-------------------------------|--------|
| | 0E33 0 70EE | * | В | | RDER3 | GO EXIT | 80919060 | |
| | | * | | | | | 80919070 | |
| | | *0001 | 30000 | 0000 | 1000000000 | | 80919090 | |
| | | * | | | | | 80919100 | |
| | | * | | | COMP | ARE SUB-ROUTINE | 80919110 | |
| | | ** | | | | 000000000000000000000000000000000000000 | 80919120 | |
| | | * | | | TUOS 21HT | INE WILL CHECK ADRS | 80919130 | |
| | | * | | | | NST ADRS EXPECTED AND | 80919140 | |
| | | * | | | COMPARE D | ATA EXPECTED AGAINST | 80919160 | |
| | | * | | | DATA READ | • | 80919170 | |
| | | * | | | E0000 001 | NTOUTS NEW YORK | 80919180 | |
| | | * | | | | NTOUTS WILL INCLUDE D NUMBER, EXPECTED, | 80919190 | |
| | | * | | | | AND TOTAL NUMBER OF | 80919200 80919210 | |
| | | * | | | ERRORS. | AND TOTAL NOTIBER OF | 80919220 | |
| • | | * | | | | | 80919230 | |
| | | * | | | | OF PRINT ONLY FIRST | 80919240 | |
| | | * | | | | PRINT ALL ERRORS IS | 80919250 | |
| | | * | | | PROVIDED | | 80919260 | |
| | | *** | ROUTI | NE | CALL | | 80919270 80919280 | |
| | | * | , | | | | 80919290 | |
| | | * | BSI | | CMP | | 80919300 | |
| | | * | MDX | | | ERROR RETURN | 80919310 | |
| | | * | | | | | 80919320 | |
| | 0E34 0 0000 | CMP | DC | | *-* | | 80919330 | |
| | 0E35 0 1010 | • | SLA | | • • | | 80919340 80919350 | |
| | 0E36 0 D202 | | STO | 2 | ERCT-TB LPRNT-TB | | 80919360 | |
| | 0E37 0 D207 | | STO | | | CLEAR ERROR COUNT CLEAR LAST-WORD-PRINTEO | 80919370 | |
| | 0E38 0 C2E1 | | LD | | K1-TB | SET INDEX TO ONE | 80919380 | |
| | 0E39 0 D201 | * | STO | 2 | INDEX-TB | * | 80919390 | 7 |
| | 0E3A 0 C200 | • | LD | 2 | LNGTH-TB | GET RECORD LENGTH | 80919400 80919410 | |
| | 0E3B 1 4C18 0E58 | | ΒZ | - | CMP3 | BRANCH IF ZERO | 80919420 | |
| | 0E3D 0 C20D | | LD | 2 | CMPTM-TB | GET NUMBER TO COMPARE WITH | | |
| | 0E3E 0 D205 | | STO | 2 | S#B&1-TB | SET | 80919440 | |
| | 0E3F 0 CA06 | | LDD | | IDS#B-TB | | 80919450 | |
| | 0E40 0 DA03 0E41 0 402C | | STD BSI | 2 | S#B-1-TB | A | 80919460 | |
| | 0E42 0 C20D | | LD | 2 | CMPB CMPTM-TB | | 80919470 | |
| | 0E43 0 D204 | | STO | | S#B-TB | | 80919480 80919490 | |
| | 0E44 0 7004 | | В | _ | CMP2 | | 80919500 | |
| | 0E45 0 C2FE | CMP1 | LD | 2 | RNDCK-TB | GET RANDOM INDICATOR | 80919510 | |
| | 0E46 1 4C28 0EA1 | | BN | | CMRND | 05 7507 505 505 | 80919520 | |
| | 0E48 0 705B 0E49 1 7401 0880 | CMP2 | B | | CMRN1 | | 80919530 | |
| | 0E4B 0 C201 | CMFZ | MDX LD | L | INDEX,1 INDEX-TB | | 80919540 | |
| | 0E4C 0 9200 | • | \$ | | LNGTH-TB | • | 80919550 80919560 | |
| | 0E4D 1 4C08 0E45 | | BNP | | CMP1 | | 80919570 | |
| | 0E4F 0 C202 | | LO | | ERCT-TB | | 80919580 | |
| | 0E50 0 0203 0E51 1 4C18 0E58 | | STO | 2 | MOD3-TB | | 80919590 | |
| | 0E51 1 4C10 0E56 | | BZ LO | 2 | CMP3 RDCMP-TB | | 80919600 | |
| - | 0E54 0 421B | | BSI | | CKPRT-TB | | 80919610 80919620 | - |
| | 0E55 0 7002 | | В. | | CMP3 | | 80919630 | |
| | 0E56 0 4230 | | BSI | 2 | STMSG-TB | PRINT NO. OF ERRORS | 19640 | |
| | 0E57 0 4E90 | | OC | | /4E10+/80 | FORM #/MSG IO | 19650 | |
| | 0E58 1 6780 0880 | * CMP3 | LOX | .12 | TNDEV | | 80919660 | |
| | 0E5A 1 C700 08C4 | UMFD | LOX | | INDEX COMA | : | 80919670 | |
| | 0E5C 1 8700 08C5 | - | A | | COMA&1 | | 80919680 809196 9 0 | 11: |
| | 0E5E 0 82E2 | | A | | K2-TB | | 80919.700 | ٠. |
| - | 0E5F 1 4C18 0E67 | | B Z | | CMPX | BRANCH IF AS EXPECTED | 80919710 | |
| | 0E61 0 C2E0 | | LO | | RDCMP-TB | GET CMP ERROR COUNT | 80919720 | as the |
| | 0E62 0 421B | | BSI | 2 | CKPRI-TB | CK PRINT-ALL-ERRORS OPTION | 80919730 | 1. |
| | | 1.5 | | | s | 사물병 - 보호의 기반 - 11년 - 1 | - | 1,74 |
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| | 0E64 0E65 0E66 | 0 0 0 | 7002 4230 7E11 C2E1 |) l l | CMP4 CMPX | B BS I DC LD A | 2 | CMP4 STMSG-TB /7E11 K1-TB ERCT-TB | BRANCH IF NOT SET PRINT OVERREAD MSG ID MAKE SURE A REG. NON-ZERO CK IF ANY ERRORS | |
| | | | | 0E6C | U 1111 X | BNZ | | CMPEX | BRANCH IF YES | 80919 7 80 80919790 |
| | | | | 0 E 3 4 | | MDX | L | | INCR RETURN | 80919790 |
| | 0E 6C | 1 | 4 C 8 C | 0E34 | CMPEX | BSC | I | CMP | EXIT ROUTINE | 80919810 |
| | | _ | | | * | | | | | 80919820 |
| | | | 0000 | | CMPB | DC | | *-* | ENTRY | 80919830 |
| | | | | 0880 0864 | | LDX | | INDEX | GET INDEX | 80919840 |
| | | | | 0864 0868 | | EOR | | COMA | COMPARE WITH S/B | 80919850 |
| | | | | 08C4 | | B Z MD X | I | CMPB COMA | EXIT IF EQUAL | 80919860 |
| | | | 1000 | | | NOP | | COMA | INCR IX BY AORS OF COMA 64K PROTECT | 80919870 |
| | 0E 78 | 0 | 6B37 | · · | | STX | 3 | PNTC+1 | SET FOR POINTER | 80919871 80919880 |
| | 0E79 | 0 | C202 | <u> </u> | | LD | | ERCT-TB | GET ERROR CNT MINUS 1 | 80919890 |
| | | | | 0881 | | MDX | L | ERCT,1 | INCREMENT ERROR COUNT | 80919900 |
| | 0E / C | 1 | 4C18 | 0E8B | | ΒZ | | CMPB2 | BRANCH IF FIRST CMP ERROR | 80919910 |
| | | | | | * | 6.45.6 | | . | | 80919920 |
| | | | | | * | CHEC | K PF | RINI ALL ER | RORS OPTION . | 80919930 |
| | 0E7E | 0 | 421B | | * | BSI | 2 | CKPRT-TB | CV DOINT ALL FORDER COTTON | 80919940 |
| | | | 701F | | | B | ۷. | CMPB6 | CK PRINT-ALL-ERRORS OPTION BRANCH IF NOT SET | |
| | | | | | * | Ü | | CHIEBO | BRANCH IF NUT SET | 80919960 80919970 |
| | | | | | 字 | PRIN | TAE | DITIONAL E | RRORS | 80919980 |
| | 0500 | _ | | | * | | | | | 80919990 |
| | | | C207 82E1 | | CMPB1 | | | LPRNT-TB | TEST TO SEE IF BAD WORDS | 80920000 |
| | | | 9201 | | | A S | | K1-TB | * AND PREVIOUS WORD HAVE | 80920010 |
| | | | | 0E9 7 | | | | INDEX-TB | * BEEN PRINTED YET | 80920020 |
| | 0E 85 | i | 4C28 | 0E95 | | BZ - BN | | CMPB4 - | BRANCH TO PRINT BAD WORD | 80920030 |
| | 0E87 | 0 | 92E1 | | | S | 2 | K1-TB | BRANCH/PRINT PREVIOUS WORD TEST FOR NEXT WORD PRINTED | 80920040 |
| | 0E88 | 1 | 4CA0 | 0E6E | | BNZ | | СМРВ | EXIT IF LAST WORD | 80920050 |
| | 0E8A | 0 | 700E | | | В | | CMPB5 | BAD WORD+1 NOT PRINTED YET | 80920070 |
| | 0500 | _ | | | * | | | | | 80920080 |
| | | | C2E0 421B | | CMPB2 | | | RDCMP-TB | GET CMP ERROR COUNT | 80920090 |
| | | | 7002 | | | BSI B | | CKPRT-TB | CK PRINT-ALL-ERRORS OPTION | |
| | 0E8E | | | | | BSI | | CMP2A STMSG-TB | BRANCH IF NOT SET | 80920110 |
| | | | 7E10 | | | DC | - | /7E10 | PRINT MESSAGE MESSAGE ID | 80920120 |
| | 0E90 | 0 | C201 | | CMP2A | _ | 2 | INDEX-TB | GET POINTER | 80920130 80920140 |
| | 0E91 | | | | | S | | K1-TB | * TO ONE (1) | 80920150 |
| | | | | 0E80 | | BNZ | | CMPB1 | BRANCH IF NOT EQUAL | 80920160 |
| | 0E94 | U | 7002 | | .4. | В | | CMPB4 | PRINT BAD WORD | 80920170 |
| | | | | | * | 00 1 117 | | | • | 80920180 |
| | | | | | * | PKINI | WU | KO PREVIOUS | S TO BAD WORD | 80920190 |
| | 0E95 | 0 | 63FF | | CMPB3 | LOX | 3 | -1 | INDEX-1 | 80920200 |
| | 0E 96 | 0 | 4014 | | | BSI | | PÑTB | PRINT | 80920210 80920220 |
| | | | | | * | | | | • | 80920230 |
| | | | | | * | PRINT | BA | D WORO | | 80920240 |
| | 0E 97 | Λ | 6300 | | * | | _ | • | | 80920250 |
| | 0E98 | | | | CMPB4 | BSI | 3 | U PNTB | SET POINTER | 80920260 |
| | | • | | | * | 031 | , | r NI D | PRINT | 80920270 |
| | | | | | * | TEST | IF ! | LAST WORD | | 80920280 80920290 |
| | | | | - | * | | | | | 80920300 |
| | 0E99 | | | | CMPB5 | | | LNGTH-TB | GET RECORD LNGTH | 80920310 |
| | 0E9A | | | | | S | | INDEX-TB | TEST FOR END | 80920320 |
| | 0E9B | 1 | 4698 | 0F9E | | ВZ | I (| СМРВ | EXIT IF LAST WORD WAS JUST | 80920330 |
| | | | - | | * | | | | | 80920340 |
| | 1.5 | | | | | PRINT | WO | O FOLLOWIN | 10 010 110 0 | 80920350 |
| - L | - | | | | * | | | . O LOCKOWIN | | 80920360 |
| | 0E 9D | | | | ·- · | LOX | 3 1 | l . | CET BOTHTES | 80920370 80920380 |
| 15 12 1 | 0E9E | | | | | BSI | | PNTB | DOINT FORM O | 80920390 |
| | 0E 9F | 1 . | 4C80 | OE6E | CMPB6 | В. | I (| CMPB | D.C.T.Lands | 80920400 |
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|--|--|---|--|---|---|---|---|--|
| ١ | IBM MAINTENANCE DIAGNOSTIC | PROGRAM FOR THE 1800 SYSTEM | ((((| | 1 1 1 | 1 1 1 1 | | |
| <u> </u> | 2310 A/B FUNCTION TEST | * | PART NO. 2196378 PAGE 16 | | NTENANCE DIAGNOSTIC B FUNCTION TEST | PROGRAM FOR THE 1800 SYST | EM | PART NO. 2196378 PAGE 16A |
| Č. | OEA1 0 C204 OEA2 0 4227 | * : CMRND LD 2 S#B-TB GET CURRENT NUMBER BSI 2 RNDOM-TB GET NEXT NUMBER | 80920410 80920420 80920430 | | OECO O EAC2 | * * | | 80921070 80921190 |
| Č | 0EA3 0 0205 0EA4 0 C204 0EA5 0 40C8 0EA6 0 C204 | STO 2 S#B&1-TB SET CMRN1 LO 2 S#B-TB CK CURRENT NUMBER BSI CMPB * | 80920440 80920450 80920460 | | OEC1 0 1890 OEC2 0 020B OEC3 0 C215 | WRTEN OR 2 WRMOO-TB SRT 16 STO 2 WRERR-TB LO 2 ADCMA-TB | COMBINE WITH WRT FNC A TO Q CLEAR ERRO CNT ADRS OF COMA | 80921200 80921210 80921220 |
| Č | 0EA7 0 D203 0EA8 0 C205 0EA9 0 D204 | LD 2 S#B-TB SET PREVIOUS NUMBER STO 2 S#B-1-TB * LO 2 S#B&1-TB SET CURRENT NUMBER STO 2 S#B-TB * | 80920470 80920480 80920490 | | OEC4 O DAC9 OEC5 O 1080 OEC6 O C2D9 | STD 2 ZXIO-TB SLT 13 LO 2 PCYL#-TB | SET FOR XEO POSITION SECTOR COUNT GET PRESENT CYLINDER | 80921230 80921240 80921250 80921260 |
| , , , , , , , , , , , , , , , , , , , | 0EAB 0 0000 | B CMP2 CK FOR COMPLETE PNTB DC *-* ENTRY | 80920500 80920510 80920520 80920530 | | OEC7 0 1083 OEC8 0 0206 OEC9 0 D246 OECA 0 6308 | SLT 3 STO 2 IDS#B-TB STO 2 COMA+1-TB | CREATE SECTOR ID UPOATE SECTOR ID SET FOR WRITE OP | 80921270 80921280 80921290 |
| yaren ' | OEAC O C2EO OEAD O 421B OEAE O 700F OEAF O C700 0000 | LD 2 ROCMP-TB GET CMP ERROR COUNT BSI 2 CKPRT-TB CK PRINT-ALL-ERRORS OPTIC B PNTBX OON'T PRINT IF NOT SET PNTC LO L3 *-* GET WORD READ | 80920540 | C | OECB 0 4221 OECC 0 C2E6 OECD 0 020A | LOX 3 WRCNT-SUM BSI 2 COUNT-TB LD 2 K8-TB STO 2 WRRTY-TB | RY POINTER INCR WRITE COUNT SET RETRY COUNTER * TO EIGHT | 80921300 80921310 80921320 |
| - | 0EB1 0 0205 0EB2 1 C700 0883 0EB4 0 D204 | PNTC LO L3 +-+ GET WORD READ STO 2 MOO5-TB SET FOR PRINT LD L3 S#B GET WORD EXPECTED STO 2 MOD4-TB SET FOR PRINT | 80920570 80920580 80920590 80920600 | C | OECE 1 6780 08B8 OEDO 0 C302 OED1 0 D026 | LOX I3 WRITE LD 3 2 STO WRTE+1 | GET ADRS OF CALL+1 GET ERROR RETURN ADDRESS SET FOR EXIT | 80921330 80921340 |
| | 0EB5 1 7780 0880 0EB7 0 1000 0EB8 1 6F00 0852 0EBA 1 6F00 0886 | MOX I3 INDEX ADJUST INDEX NOP IN CASE SKIP OCCURS STX L3 MOO3 SET FOR PRINT | 80920610 80920620 80920630 | C | 0E02 0 C300 0E03 0 D2FF 0E04 0 18DE 0E05 0 1802 | LO 30 STO 2NOCK-TB RTE 30 SRA 2 | GET WORD COUNT WORD BIT O MEANS OON'T CK ERROR SAVE BITS O-1 WORO CNT W/O BIT O-1 | t |
| | OEBC 0 4230 OEBD 0 6E90 OEBE 1 4C80 OEAB | STX L3 LPRNT SET AS LAST WORD PRINTED BSI 2 STMSG-TB PRINT W/O PIO,MID,RID,RAC DC /6E10+/80 FORM #/MSG IO PNTBX B I PNTB EXIT . | 80920640 20650 20660 80920670 | | 0E06 0 0245 0E07 0 18C1 0E08 1 4C28 0EDC | STO 2 COMA-TB RTE 1 BN WRTF | SET WORD COUNT GET BIT 1 BACK BIT 0 SET MEANS DON'T | 80921410 |
| en en en en en en en en en en en en en e | | * | - 80920680 - 80920690 - 80920700 | | OEDA O C301 OEDB O 422A | LD 3 1 BSI 2 SETV-TB | * PRESET THE I/O AREA NUMBER PRESET I/O AREA | 80921420 80921430 80921440 |
| # | | * WRITE ROUTINE * ********************************** | 80920710 80920720 80920730 | | 0EDC 1 7402 08B8 | WRTF MDX L WRITE,2 * * | | 80921450 80921460 80921470 80921480 |
| . 100 | | * * THE ROUTINE WILL INSERT | 80920750 80920760 80920770 | | OEOE 0 423C | # ISSUE # WRTA BSI 2 XEQ-TB # | WRITE THRU XEQ RTN ISSUE WRITE COMMAND | 80921490 80921500 80921510 |
| April 1 | | THE WORD COUNT AND THE DISK ADRS AS THE FIRST TWO WORDS OF THE I/O AREA AND ISSUE THE WRITE THRU THE XEQ ROUTINE. | 80920780 80920790 80920800 80920810 | C. + | OEOF O C2FF | * | T AS IF NORMAL WRITE. | 80921520 80921530 80921540 80921550 |
| | | * AFTER INTRPT THE OSW IS CHECKED FOR ANY ERRORS. | 80920820 80920830 80920840 | ÷. | 0EE0 1 4C28 0F05 | # WRIX2 | GET NO CHECK SWITCH IF NON-ZERO, EXIT FOR DSW ERRORS | 80921560 80921570 80921580 |
| | | * IF ERRORS ARE FOUND THE ROUTINE * WILL RETRY UP TO EIGHT TIMES. * | 80920850 80920860 80920870 80920880 | | OEE2 0 C2C7 OEE3 1 4C10 OEF9 | * LD 2 ZSNS-TB | INTRPT OSW BRANCH IF NO ERROR | 80921590 80921600 80921610 80921620 |
| en e | | * LOCK ON ERROR OPTION IS * PROVIOED AND WILL LOCK THE * ROUTINE IN WRITE ON EITHER AN | 80920890 80920900 80920910 | | OEE5 1 7401 088A | MOX L WRERR,1 | INCR ERROR SWITCH | 80921630 80921640 80921650 |
| 5% | | * INTERMITTENT OR SOLIO ERROR. * THE LOCK WILL REMAIN IN EFFECT * UNTIL THE SWITCH IS CLEARED. | 80920920 80920930 80920940 80920950 | | 0EE7 0 4230 0EE8 0 5E0B 0EE9 0 C20B | BSI 2 STMSG-TB DC /5EOB | CALL SET MSG RTN MESSAGE IO | 80921660 80921670 80921680 80921690 |
| | | * **** ROUTINE CALL * A REG. = SECTOR COUNT | 80920960 80920970 80920980 | | OEEA 0 4218 OEEB 1 OEOE | BSI 2 CKLK-TB | CK LOCK ON ERROR RETURN ADRS IF ON | 80921700 80921710 80921720 |
| | | * BSI 2 WRITE-TB * DC WORD COUNT * BIT 0 EQUAL 1 MEANS | 80920990 80921000 80921010 80921020 | - | OEEC 1 74FF 0889 OEEE 0 70EF | # MOX L WRRTY+-1 | IN ERROR SW IS OFF DECR RETRY CTR | 80921730 80921740 80921750 80921760 |
| | | * OON'T PRESET I/O AREA. * BIT 1 MEANS WRITE/RETURN * W/O CKING OSW FOR ERRORS | 80921030 21031 | en en en en en en en en en en en en en e | | * * EIGHT | RETRYS HAVE FAILED | 80921770 80921780 80921790 |
| | | * OC NUMBER USEO AS PRESET * DC AORS TO RETURN TO * IF 8 RETRYS FAIL | 80921040 80921050 80921060 | | 0EEF 0 C20B 0EF0 0 0203 | LO 2 WRERR-TB | GET ERROR CNT | 80921800 80921810 80921820 80921830 |
| | NATE 04NDV66 01DCT67 | 15FEB68 020EC68 14NOV69 30JAN70 20MAR70 | 0000 10 | OATE | 04.10144 | | * * * | * |
| | C NO. 415233 411875 | 15FEB68 020EC68 14NOV69 30JAN70 20MAR70 411913 411961 431319 431319A 431320 | PROG IO 0809-2 PAGE 16 | OATE EC NO. | 04NDV66 010CT67 415233 411875 | 15FEB68 02DEC68 14N0 411913 411961 4313 | | PROG IO 0809-2 PAGE 164 |
| , | * | | | | | . * | | |

| 0EF1 0 4230 0EF2 0 4E0C | BSI 2 STMSG-TB HARD WRITE ERROR DC /4FOC MESSAGE TO | 80921840 | 2310 A/B FUNCTION TEST | 000000000000000000000000000000000000000 | PAGE 17A |
|---|--|--|--|---|--|
| OEF3 O 630A OEF4 O 4221 OEF5 O C28C OEF6 O D246 OEF7 O 4COO OOOO | * LDX 3 HRDWR-SUMRY POINTER BSI 2 COUNT-TB INCR HARD WRITE ERROR LD 2 TERM-TB GET FFFF STO 2 COMA&1-TB SET IN 1/O AREA WRTE B L *-* DSW ERROR EXIT | 80921850 80921860 80921870 80921880 80921890 80921900 80921910 | 0F14 1 C480 0897 L 0F16 0 D004 S 0F17 0 1800 R 0F18 0 C283 L 0F19 0 108C S | Z CKLKZ DON'T CK IF A REG. ZERO D I CKLK GET LOCK ADRS TO CKLK1+1 SET AS RETURN TE 16 SET IN Q D 2 SWO-TB GET SW FNC O LT 12 CK FOR LOCK ON ERROR | 80922520 80922530 80922540 80922550 80922560 80922570 80922580 |
| 0EF9 0 C20B | * * WRITE WAS SUCCESSFUL | 80921920 80921930 80921940 | OF1C 1 7401 0897 CKLK2 M | N L *-* BRANCH IF ON | 80922590 80922600 80922610 |
| OEFA O D2D3 OEFB 1 4C18 OFO3 OEFD 0 4218 OEFE 1 OEDE OEFF 0 6309 OFOO 0 4221 OFO1 0 4230 OFO2 0 4A03 | STO 2 MOD3-TB SET FOR PRINT BZ WRTX BRANCH IF NONE BSI 2 CKLK-TB ELSE CHECK LOCK-ON-ERR DC WRTA RETURN ADRS IF ON LDX 3 SFTWR-SUMRY POINTER BSI 2 COUNT-TB INCR SOFT WRITE ERROR BSI 2 STMSG-TB RECOVERED ERROR | 80921950 80921960 80921970 80921980 80921990 80922000 80922010 80922020 | 0F26 1 7401 089A CKPRA M 0F28 1 4C80 089A B | D 2 SWO-TB GET FNC SW 00 LA 10 BIT 10 NN I CKPRT EXIT IF NOT SET DX L CKPRT,1 BUMP RETURN I CKPRT EXIT | 80922620 80922630 80922640 80922650 80922660 80922670 80922680 80922690 |
| 0F03 1 7401 08B8 0F05 0 C28C 0F06 0 D246 | DC /4A03 MESSAGE ID * WRTX MDX L WRITE.1 INCR RETURN WRTX2 LD 2 TERM-TB GET FFFF | 80922030 80922040 80922050 80922060 | | SUB-ROUTINE SETV | 80922710 80922720 80922730 |
| 0F07 1 4C80 0888 | STO 2 COMAE1-TB SET IN I/O AREA B I WRITE EXIT * | 80922070 80922080 80922090 80922100 | **** ROL | TINE CALL | 20 80922740 80922750 80922760 80922770 |
| | * * | 80922110 80922120 80922130 | * BS | A)=WORD TO BE PRESET IN I/O AREA I 2 SETV-TB | 80922780 80922790 80922800 80922810 |
| | * ** ** ** ** ** ** ** ** ** ** ** ** * | 80922170 | 0F2C 0 7301 MD 0F2D 1 D700 08C5 SETVA ST 0F2F 0 73FF MD | O L3 COMAG1 STORE WORD IN I/O AREA X 3 -1 DECR COUNT | 80922810 80922820 80922830 80922840 80922850 |
| | * ROUTINE IS ENTERED WITH PREVIOUS NUMBER THAT WAS GENERATED, IN THE A REG. * ROUTINE EXITS WITH A NEW 16-BIT | 80922200 80922210 | 0F30 0 70FC B 0F31 1 4C80 08A9 B | SETVA LOOP I SETV EXIT | 80922860 80922870 80922880 |
| | * NUMBER IN THE A REGISTER - * * ***** ROUTINE CALL | 80922220 80922230 80922240 80922250 | PR | INT SUMMARY TABLE: | 80922900 80922910 80922920 80922930 |
| | * A REG = NUMBER * BSI 2 RNDOM-TB * | 80922260 80922270 80922280 80922290 | * BS: * *****ALTE | TINE CALL 1 2 TEXIT-TB RNATE CALL | 80922940 80922950 80922960 80922970 |
| 0F09 1 4C04 0F10 0F08 0 F28C 0F0C 0 A2C1 0F0D 0 1090 0F0E 1 4C80 08A6 | * RNDME BOD RNDMB IF ODD JUST COMPLEMENT EOR 2 TERM-TB ELSE COMPLEMENT M 2 K259-TB ** AND GENERATE NEW NUMB. SLT 16 GET LOW ORDER 16 BITS RNDMX B I RNDOM FXIT | 80922350 | * THI * ANE | C L DETXT. IS ROUTINE WILL PRINT THE SUMMARY TABLE D SET SW 15 IN FUNCTION ZERO. 100000000000000000000000000000000000 | 80922980 80922990 80923000 80923010 80923020 |
| 0F10 0 F28C 0F11 0 70FC | RNDMX B I RNDOM EXIT * RNDMB EOR 2 TERM-TB COMPLEMENT NUMBER B RNDMX AND EXIT * | 80922360 80922370 80922380 80922390 | 0F33 0 C283 DFTXT LD | MINATE DET 2 SWO-TB FUNCTION OO | 80923030 80923040 80923050 80923060 |
| | * ROUTINE TO CHECK FOR LOCK | 80922440: | 0F34 0 EAE1 OR 0F35 0 D283 STO 0F36 0 4230 BSI 0F37 0 5A04 DC 0F38 1 7401 0868 PRSUM MOX | 2 K1-TB SET BIT 15 TO TERMINATE 2 SWO-TB # DFT PROGRAM 2 STMSG-TB TERMINATE DFT /5A04 MESSAGE ID | 80923070 80923080 80923090 80923100 80923110 |
| | ON ERROR OPTION **** ROUTINE CALL * | 80922450 80922460 80922470 80922480 | 0F3A 0 6500 1D01 LDX 0F3C 0 6921 STX 0F3D 0 6103 LDX | L1 /1001 FORM #/MID 1 10 SET FOR CALL 1 3 SET LINE COUNT | 80923120 23130 23140 80923150 |
| | * BSI 2 CKLK-TB * DC ADRS TO RETURN TO IF SH IS SET. | 80922490 80922500 80922510 | 0F40 0 4013 PRLN1 BSI 0F41 0 7303 MDX 0F42 0 71FF MDX | L3 SKCNT SET ADDRESS SUMRY TABLE PRSM1 PRINT ONE LINE 3 3 INCR ACRS POINTER 1 -1 DECR LINE COUNT. | 23160 23180 80923190 80923200 |
| 04NOV66 010CT67 415233 411875 | 15FEB68 02DEC68 14NOV69 30JAN70 20MAR70 | PROG ID 0809-2 C | ATE 04NOV66 010CT67 15FEB68 | 02DEC68: 14N0V69 30JAN70 20MAR70 | |
| | man to the second of the secon | | C NO. 415233 411875 411913 | 411961 431319 431319A 431320 | PROG ID 0809-2 |

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| IBM MAINTENANCE DIAGNOSTIC | PROGRAM FOR THE 1800 SYSTEM | PART NO. 2196378 | IBM MAINTENANCE GLAGNOSTIC BROCKAN FOR THE 1999 BUSTON | |
| 2310 A/B FUNCTION TEST | | PAGE 18 | 100 2170376 | |
| 0F43 0 70FC 0F44 0 6500 3D81 0F46 0 6917 0F47 0 400C 0F48 0 6500 6D81 0F4A 0 6913 0F4B 0 6103 0F4C 0 7301 0F4C 0 7301 0F4C 0 7302 0F4F 0 71FF 0F50 0 70FC 0F51 0 4220 0F52 2 4C80 012E 0F54 0 0000 0F55 0 C2EC 0F56 0 D2D3 0F57 0 C300 0F58 0 D2O4 0F59 0 C301 0F5A 0 D2D5 0F5B 0 C302 0F5C 0 D206 0F5C 0 D206 | MDX PRLN1 LOOP-PRINT 3 LINES LOX LI /3D01+/80 FORM #/MESSAGE ID STX 1 IO SET FOR CALL BSI PRSM1 PRINT ONE LINE LDX L1 /6D01+/80 FORM #/MSG ID STX 1 ID SET FOR CALL LOX 1 3 SET LINE COUNTER MDX 3 1 SET AORS POINTER PRLN3 BSI PRSM1 PRINT ONE LINE MDX 3 2 INCR AORS POINTER MDX 3 2 INCR AORS POINTER MDX 1 -1 DECR LINE COUNTER MDX PRLN3 LOOP-PRINT 3 LINES BSI 2 STMLS-TB EXIT TO MONITOR BSC I END TERMINATE DET PRSM1 DC *-* SUBRTN ENTRY PT LO 2 PSSCT-TB GET PASS COUNT STO 2 MOO3-TB SET IN MSG LD 3 0 GET MOOIFIER STO 2 MOD4-TB SET IN MSG LD 3 2 GET MOOIFIER STO 2 MOD5-TB SET IN MSG LD 3 2 GET MOOIFIER STO 2 MOD5-TB SET IN MSG STO 2 MOD6-TB SET IN MSG STO 2 MOD6-TB SET IN MSG BSI 2 STMSG-TB CALL PRINT ROUTINE | 80923210 23211 23220 23230 80923240 80923250 23270 80923280 80923390 80923310 80923320 80923320 80923390 80923390 80923400 80923420 80923420 80923420 80923420 80923440 80923450 | # F = FORM NUMBER 80923930 ## MMM = MESSAGE ID 80923940 ## BIT 8 MEANS DON'T PRINT PID MID, ETC. 23941 # 80923950 # FORM MOD MOD MOD MOD MOD MOD MOD 80924050 # NO. 1 2 3 4 5 6 7 80924060 # NO. 1 2 3 4 5 6 7 80924060 # 0 DSW FILE# HEX HEX 80924070 # 1 OSW FILE# DEC DEC DEC BE 80924100 # 2 DSW FILE# DEC DEC DEC 80924100 # 3 OSW FILE# DEC DEC DEC 80924100 # 3 OSW FILE# DEC DEC DEC 80924100 # 4 OSW FILE# DEC DEC DEC 80924100 # 5 DSW FILE# DEC DEC 80924100 # 5 DSW FILE# DEC DEC 80924100 # 6 OSW FILE# DEC DEC 80924100 # 7 OSW FILE# DEC HEX HEX 80924170 # 80924100 # 6 OSW FILE# DEC HEX HEX 80924170 # 7 OSW FILE# DEC HEX HEX 80924200 # 7 OSW FILE# DEC HEX HEX 80924210 # 80924210 | |
| OF5E 0 0000 OF5F 0 COFE OF60 0 EAC6 OF61 0 OOFC OF62 1 4C80 OF54 OF66 1 C700 086A OF66 0 82E1 OF67 1 D700 086A OF69 0 92EA OF6A 1 4CAO 08AO OF6C 0 70FA | ID OC *-* FORM/MSG ID OR 2 H0080-TB DON'T PRINT PIO, MID STO ID PUT IT BACK BSC I PRSM1 EXIT FROM RTN *** *** INCREMENT AN ENTRY IN THE SUMMARY.** ** ** INCREMENT AN ENTRY IN THE SUMMARY.* ** ** IX 1 IS THE POSITION IN THE SUMMARY.* ** ** COUNT EXCEEDS 9999, THE COUNTER IS RESET TO ZERO SO THAT A MOOULO 10,000 IS SIMULATED. THIS IS TO RELIEVE PRINTOUT PROBLEMS.* ** COUNE LD L3 SUMRY GET PROPER COUNTER A 2 K1-TB AOO ONE ** COUNA STO L3 SUMRY STORE S 2 K10TH-TB SUBTRACT 10,000. THIS WILL ** BNZ I COUNT EXIT IF NOT 10,000 ** ** ** ** BNZ I COUNT EXIT IF NOT 10,000 ** ** ** ** ** ** ** ** * | 80923550 80923560 80923570 80923590 80923600 80923610 80923620 80923640 80923650 80923660 80923670 80923690 80923730 80923730 80923730 80923740 80923740 | ************************************** | |
| | * SUB-ROUTINE STMSG * COMMON MESSAGE SETUP RTN * THIS ROUTINE WILL BUILD THE * MESSAGE DESIRED AND CALL RTN | 80923770 80923780 80923790 80923800 80923810 80923820 80923830 80923840 | OF81 O C2EB | 4 |
| | * PRINT TO PRINT THE MESSAGE. ****** ROUTINE CALL * BSI 2 STMSG-TB * DC MSG ID * MSG ID = FMMM (WHERE) | 80923850 80923860 80923870 80923880 80923890 80923900 80923910 80923920 | * *** *** *** *** *** *** *** * | |
| DATE 04N0V66 010CT67 EC-NO• 415233 411875 | 15FEB68 02DEC68 14NOV69 30JAN70 20MAR70 411913 411961 431319 431319A 431320 | 0400 | OATE 04NOV66 010CT67 15FEB68 02DEC68 14NOV69 30JAN70 20MAR70 PROG ID 0809-2 EC NO. 415233 411875 411913 411961 431319 431319A 431320 PAGE 18A | |

| | | CE UIA | | PROGRAM FOR | THE 1800 SYS | TEM | | PART N PAGE | 10. 2196378 19 | BM MAIN | ITENANCE (| DIAGNOSTIC F | ROGRAM | FOR | THE 1800 SYST | EM | PART N | 0. 2196378 19A |
|------|--------------|-------------------------|---------|--------------------------|-------------------------|--|-----------|--------------------------------|--------------------------------|---|---------------------------|--|------------|---------------|--|--|--|------------------------|
| , 4/ | FUNC | IION I | E31 | | | | | | | 2310 A/8 | FUNCTION | I TEST | | | | | | |
| | 0F 8E | 1 0F9 1 0F9 1 0F9 | A | OC OC OC | FORM3 FORM4 FORM5 | • | 3 | 80924680 80924690 | | | 0FB2 0 8 | 32E2 | * FORMA | A | 2 K2-TB | SET WORO COUNT | 80925360 80925370 | |
| | 0F90 | 1 0F9 | F | oc | FORM6 | | 5 6 | 80924700 80924710 | | | | | * * | | FORM | 15 0 | 80925380 80925390 | |
| | | 1 OFA 1 OFB | _ | 0 ¢ 0 ¢ | FORM7 FORM8 | | 7 | 80924720 | | | | | * | | | | 80925400 | |
| | 0F 93 | 1 OFB | 3 | OC | FORM9 | | 8 9 | 80924730 80924740 | | | OFB3 0 8 | | FORM9 | A B | 2 K1-T8 FORM5 | INCR MOO CNT COMMON ROUTINE | 80925410 80925420 | |
| | 0F94 | 1 OFB | 2 | OC * | FORMA | | A | 80924750 | | | | | | | | | 80925430 | |
| | | | | * | | | | 80924760 80924770 | | | OFB5 1 (| 700 0851 | | | L3 FILE# | GET MODIFIER | 80925440 80925450 | |
| | | | | * | FURI | M IS O | | 80924780 80924790 | | | 0FB7 0 4 | 034 0700 0851 | | BS I S T O | BNOEC L3 FILE# | CONVERT TO DECIMAL SET IN MODIFIER | 80925460 80925470 | |
| | | 0 82E | | FORMO A | 2 K2-TB FORM5 | INCR MOD CNT | | 80924800 | | | OFBA O 7 | 73FF | PRINT | MOX | 3 -1 | OECR CONVERSION CTR | 80925480 | |
| | | - , | - | * | | COMMON ROUTINE | | 80924810 80924820 | | | OFBB 0 7 | | PRINB | MOX LO | MSGC1 2 MSGIO-T8 | LOOP GET MSG 10 | 80925490 80925500 | |
| • | • | | | * | FOR | M IS 1 | | 80924830 80924840 | | | OFBO O I | 800 | | SRA | 13 | | 80925510 | |
| | 0F97 | 0 82E | 1 | FORM1 A | 2 K1-TB | INCR MOD CNT | | 80924850 | | | 0FBF 1 4 | C18 OFCC | | EOR BZ | 2 K7-T8 Prina | (NO MESSAGES WITH F) BRANCH FOR ERROR MESSAGE | 80925520 809255 3 0 | |
| | | | | * | FOR | M IS 2 | | 80924860 80924870 | | | 0FC1 0 0 | | | LO Sla | 2 SWO-TB 13 | GET SW FNC O 8IT 13-BYPASS ALL LOGS | 80925540 80925550 | |
| | 0F98 | 0 82E | 1 - | * FORM2 A | 2 K1-TB | INCR MOO CNT | | 80924880 | | | | C28 0F01 | | BN | STMSX | EXIT IF SET | 80925560 | |
| | | | | * | | | | 80924890 80924900 | | | | 480 012F | * | 8S I | I LOG | MONITOR LOG CALL | 80925570 80925580 | |
| | | | | * | FUKI | M IS 3 | | 80924910 80924920 | | | OFC7 1 0 | | | 0C | MSGO PRBSY | AORS MSG BUSY RETURN | 80925590 80925600 | |
| | 0F 9 9 | 0 82E1 | 1 | FORM3 A | 2 K1-TB | INCR MOO CNT | | 80924930 | | | OFC9 1 0 | F01 | | oc | STMSX | MSG COMPLETE RETURN | 80925610 | |
| | | | | * | FORF | M IS 4 | | 80924940 80924950 | | | OFCA 2 4 | C80 0120 | * | BSC | I START | EXIT TO MONITOR | 80925620 80925630 | |
| | 0F9A | 0 82E1 | 1 | ∓ FORM4 A | 2 K1-TB | INCR MOD CNT | | 80924960 809 24 970 | | | OFCC 2 4 | 480 0130 | PRINA | BS I OC | I ERROR MSGO | MONITOR ERROR CALL AORS MSG | 80925640 80925650 | |
| | 0F 9B | 0 6306 | 5 | LOX | 3 6 | SET CONVERSION C | TR | 80924980 | | | OFCF 1 | F07 | | OC | PRBSY | BUSY RETURN | 80925660 | |
| | | | | * | | 1 IS 5 | | 80924990 80925000 | | | 0F00 1 0 | 0F09 0500 0000 | | OC LOX | PRLP L1 *-* | LOOP RETURN RESTORE XR 1 | 80 9 256 7 0 80925680 | |
| | | | | * | COMMON ROUTI | , NE | | 80925010 80925020 | | | | 700 0000 C80 08AF | | | L3 *-* | RESTORE XR 3 | 80925681 | • |
| | | 0 EACE 0 O2CE | | FORM5 OR STO | 2 MSGO-TB 2 MSGO-TB | SET MSG WORO COUN | NT | 80925030 | | | 000014 | COU UOAF | * | | I STMSG | RETURN TO USER | 80925682 80925690 | |
| | | 0 7018 | | В В | PRINT. | PRINT | | 80925040 80925050 | | | | | * | PR IN | TER IS BUSY | | 80925700 80925710 | |
| | | | | * | F∩R⊩ | 1 IS 6 | | 80925060 80925070 | • | | 0F07 0 4 | | | | 2 STMLS-TB | EXIT TO MONITOR | 80925720 | |
| | 0F9F | 0 82E3 | 1 | * FORM6 A | 2 K3-TB | | | 80925080 | | | 0F08 0 7 | 063 | * | В | PRINB | TRY AGAIN | 80925730 80925740 | |
| | OF AO | 0 6302 | 2 | LOX | 3 2 | INCR MOD CNTR SET CONVERSION CN | NTR | 80925090 80925100 | | | | | * | LOOP | ON ERROR RETU | JRN | 80925750 80925 7 60 | |
| | UFAI | 0 70FA | 1 | B * | FORM5 | | | 80925110 80925120 | | | 0F09 0 0 | | _ | LO | 2 RIO-TB | GET PRESENT ROUTINE NUMBER | 80925770 | |
| | | | | * | FORM | 1 IS 7 | | 80925130 | • | | | C18 0A89 C00 0AF8 | | BZ B | PRECN L CNTLO | IF ZERO, GO TO PRE-CONTROL ELSE LOOP SAME ROUTINE | 80925780 80925790 | |
| | | 0 C246 | | FORM7 LO | 2 COMA+1-T8 | GET OISK AORS REA | 40 | 80925140 80925150 | | | | | * | | ROUTI | NE TO FORMAT OSK AORS | 80925800 80925810 | |
| | | 0 403A 0 0204 | | BSI STO | SECT 2 MOO4-T8 | FORMAT FOR MSG SET CYL S/B IN MS | S.C. | 80925160 80925170 | | | 0505 0 0 | | * | 00 | | - | 80925820 | |
| | | 0 1800 0 0206 | | RTĘ | 16 | SWAP A ANO Q | | 80925180 | | | 0F0E 0 0 0F0F 0 1 | | | OC SRT | *-* 3 | SUB-ROUTINE ENTRY POSITION | 80925830 80925840 | |
| ٠ | OFA7 | 0 C206 | • | STO LO | 2 MOD6-T8 2 IOS#B-TB | SET SECT S/B IN M GET OSK AORS S/B | 15G | 80925190 80925200 | | | OFEO 0'0 | | | STO SLA | 2 MOO7-TB 16 | SAVE CYL SET HEAD IN CHAR 3 | 80925850 80925860 | |
| | | 0 4035 0 0203 | | BS I STO | SECT 2 MOO3-TB | FORMAT FOR MSG SET CYL WAS IN MS | · | 80925210 | - | | OFE2 0 1 | .081 | | SLT | 1 | * AND SEC IN CHAR 4 | 80925870 | |
| | OFAA | 0 1800 0 D205 |) | RTE | 16 | SWAP A AND Q | • | 80925220 809252 30 - | | 1 | OFE3 0 1 OFE4 0 1 | | | SLA SLT | 2 2 | * - · | 80925880 80925890 | • |
| | OFAC | 0 C200 |) | STO LO | 2 MOO5-TB 2 LNGTH-TB | SET SECT WAS IN M GET RECORD LENGTH | | 80925240 80925250 | | | 0FE5 0 0 | | | STO LO | 2 BNTMP-TB 2 MOO7-TB | SAVE HO/SECT GET CYL | 80925900 80925910 - | |
| | | 0 403E 0 0207 | | 128 012 | BNOEC 2 MOO7-TB | CONVERT TO DECIMA | IL . | 80925260. | - | | OFE7 0 4 | 004 | | BSI | BNOEC | CONVERT TO OEC | 80925920 | · |
| | ÖFAF | 0 C2E5 | | Ļ0 | 2 K7-TB | SET MOO CNT | - | 80925270 80925280 | | | 0FE8 0 0 | | | \$T0 L00 | 2 MOO7-TB 2 MOO7-TB | STORE PUT HO/SECT IN Q | 80925930 80925940 | _ |
| | UFBU | 0 70EB | - | * 8 | FORM5 | COMMON ROUTINE | | 80925290 80925300 | 2.5 | | OFEA 1 4 | C80 OFOE | | | I SECT | EXIT SUB-ROUTINE | 80925950 | - |
| | a say and | | | * | FORM | IS 8 | . : : : : | 80925310 | es acomo fore a processor or a | e pro-f in the property of the first constant | an magazante e e e entire | A STATE OF THE STA | **** | | and the second s | | 80925960 80925970 | i za wana a sama a jan |
| | OFB1 | 0 82E1 | | FORM8 A | 2 K1-TB | SET WORD COUNT | · | 80925320 80925330 | | | | | * | , | CONVERT A POS RANGE FROM O- | ITIVE NUMBER IN THE 9999 TO IT'S OECI- | 80925980 80925990 | |
| | | | * 11.1 | * | FORM | IS A | ** | 80925340 80925350 | * | | | | * | · | MAL EQUIVALEN | | 80926000 | |
| | | | | | 8 9 | | | | | | | | | | | | 80926010 | |
| 1. 1 | | | | | | | | | | | * | | | | | | | |
| | 04N0 | | 010CT67 | 15FEB68 | 020EC68 14N | NOV69 30JAN70 2 | OMAR70 | PROG IO | 0809-2 | OATE | 04NOV66 | 010 CT 67 | 15FEB | 6.8 | 020EC68 14N | OV69 30JAN70 20MAR70 | PROG IO | 0000-3 |
| | 4152 | 33 4 | 411875 | | | | 31320 | PAGE | 19 | EC NO. | 415233 | 411875 | 41191 | | 411961 431 | The state of the s | PAGE | 0809-2 19A |

2310 A/B FUNCTION TEST

OFFF O

| | | • | |
|--|---|--|--|
| OFEC O 0000 OFEO 1 4CA8 OFEC OFEF O 1890 OFFO O AA13 OFF1 O 100C OFF2 O 02CB OFF3 O 1004 OFF4 O AA12 OFF5 O 1008 OFF6 O EACB OFF7 O D2CB OFF8 O 1008 OFF9 O AA11 OFFA O 108C OFFB O 180C OFFC O 1084 OFFD O FACB | * * * BNDEC OC BN SRT O SLA STD SLA OR SLT SRA SLT | ENTER ROUTINE WITH THE NUMBER IN THE A REGISTER. EXIT WITH THE CDNVERTED NUMBER IN THE A REG. *-* ENTRY POINT BNOEC EXIT IF NEGATIVE A TO Q THOUS-TB MOST SIGNIFICANT OIGIT PDSITIDN OIGIT SAVE CLEAR A REG HUNOR-TB PDSITIDN SNXIO-TB COMBINE IN HEX WDRD SNXID-TB SAVE CLEAR A TEN-TB COMBINE LAST TWD OIGITS COMBINE LAST TWD OIGITS COMBINE LAST TWD | 80926020 80926030 80926040 80926060 80926060 80926070 80926100 80926110 80926120 26130 80926140 80926140 80926150 80926160 80926170 26180 80926190 80926200 |
| OFFD 0 EACB OFFE 1 4C80 OFEC | DR | 2 SNXIO-TB COMBINE IN HEX WORD I BNOEC EXIT WITH WDRO IN A REG. | 80926210 80926220 80926230 |
| | * | | 80926280 |

END BEG

NO STATEMENTS FLAGGED IN THE ABOVE ASSEMBLY

```
2310 A/B FUNCTION TEST
        ADCMA 0894 ODD7 0EC3
        ADDEF 0893 0A4C
        AODIF 0895 0A55
        ADZIP 0896 0A56
              0C38 0C52 0C70 0C72 0C96
        BADCY 081F 0A08 0012
        BOCYL 0A30 0080 0D85 0087 0D90 00A9 00AC
        BEG
              0822 1000
        BEGIN 012C
        8NDEC OFEC OFAD OF87 OFE7 OFED OFFE
        BNTMP 0857 0FE5
                   OBC3 OBC9 OC1C OC2C OC45 OC4B OC92 OD54 OD64 OOBD OE01 OE24 OEEA
       CKLK 0897
                    OEFO OF14 OF1C OF1E
       CKLKE OF12
       CKLK1 OF1A
                   0F16
       CKLK2 OF1C OF12
       CKPRA OF26
       CKPRE 0F20
                   089B
       CKPRT 089A
                   08DE 0CA2 0E19 0E54 0E62 0E7E 0E8C 0EAD 0F24 0F26 0F28
       CKR01
       CKRD3
             OCC9 OCCC
       CMN1
              0B94
       CMN2
             OB92 OBA1
       CMN3
              0B9D
                   OBA4
       CMP
             OE6E 0E41 0E73 0E88 0E9B 0E9F 0EA5
       CMPB1
             0E80 0E92
       CMP82
             0E8B 0E7C
       CMPB3
             0E95
       CMPB4
             0E97
                   0E83 0E94
       CMPB5 0E99
                  0E8A
       CMPB6 0E9F
       CMPEX 0E6C
                  0E68
       CMPTM 088C
                   ODE8 0E3D 0E42
       CMPX
             0E67 0E5F
       CMP1
             0E45 0E4D
       CMP2
             0E49
                  OE44 OEAA
       CMP2A 0E90
                  0E8D
       CMP3
             0E58
                  0E3B 0E51 0E55
      CMP4
             0E66 0E63
      CMRNO OEA1 0E46
      CMRN1 OEA4
                  0E48
      CMRTB OBBD
                  OBB6 OBBC
      CMRTC OBBF
      CMRTF OBC8
                  OBC1
      CMRTL OBB3
                  OBC4 OBC6 OBCA
      CMRT2 OBA9 OB99
      CNTA
             087C 0D33 0D66
      CNTB
            085B 0BE9 0BEF 0D34 0072
            OAE1 089E 0B3E 0BB2 OBCE 0BEA 0BF4 0BFA 0C33 0C50
      CNTL
      CNTLB DAEE DAFA
      CNTLO OAF8 OAE6 OFOC
      CNTLE 0890 0A73 0B3C 0B58 0B5B 0B68 0B8F 0BC7 0BCB 0BEE 0C2A 0C2E 0C49 0C40
                  0C9A 0D6F
            08C4 0894 0A7E 0AC2 0ACF 0A06 0ADA 0B1C 0B41 0B42 0B47 0B51 0BB4 0B03
      COMA
                  OCO8 0C56 0C68 0C76 0C03 0038 007F 009A 0DE5 0E5A 0E5C 0E71 0E75
                  OEC9 0E06 0EF6 0F06 0F2A 0F20 0FA2
      CDMPT 0811
      CDUNA 0F67
      CDUNE 0F64 08A1
      COUNT 08A0 0036 0D59 006E 0076 00A4 0DB4 00EE 0E04 0E29 0ECB 0EF4 0F00 0F6A
      CY000 0815 001C
      CY001 0816
      CY002
            0817 OC77
      CY003 0818
      CY199 0819
      CY200 081A
```

----- 80926290

LAST PROGRAM AOORESS

INITIAL XFER ADORESS

04NDV66 01DCT67 15FEB68

411913

411961

411875

EC NO.

415233

020EC68 14NDV69 30JAN70 20MAR70

431319A

431320

431319

PROG ID

PAGE

0809-2

21

OATE

EC ND.

04NDV66

411875

415233

010CT67 15FEB68 02DEC68

411913

411961

431319

30 JAN 70 20 MAR 70.

431319A

0809-2

21A

10 A/B FUNCTION TEST

```
READA OOEF 0E02 0E25
 READB 0DF1 0E0F 0E21 0E32
 REAOX 0E07 ODFF 0E28
 RELDV 0132 0CF1
 REQDV 0131 OCAF
 RID 0800 0A77 0AE8 0AEA OAEE 0AF8 0C21 0FD9
 RLDVE OCEE 08BF
 RNOCK 0870 00E0 0E45
 RNDMB OF10 OF09
 RNOME OF09 08A7
 RNOMX OF OE OF 11
 RNOOM 08A6 0B86 0C0D 0EA2 0F0E
 RNOSK 081D 0B80
 RNOWR 081E 0C00 0C04
 RQDV OCAC 08C2
 RTCNT 0888 0D04 00CF
 RTNER 088B 0AF5 0BC2 0BC8 0C1B 0C2B 0C44 0C4A 0C7B 0C80 0C91 0CA1 0CA5
 RTN1 OBOE OBOO OB3B
 RTN1G 0B27 0B18 0B23
 RTN10 0B3A 0B28 0B36
 RTN1Q 0B17 0B13
 RTN10 OBF8 OB09
 RTN11 OC31 OBOA
 RTN12 OC4E
            0B0B
RTN13 OBAO OBOC
RTN14 OBA2 OBOD
RTN2 0B3D 0B01
RTN2A
      0B51
            0B4D
 RTN2B 0B59 0B54
RTN20 OB4F OB4A
RTN2L 0B40
            OB5A
RTN3 OB5C
            0802
RTN3P 0869 0861 0867 0878
RTN3Q OB6D OB7A
RTN3R 0871 086F 0873
RTN3S 0B73 0B72
RTN3T 0877 086A 086D 0875
RTN3U 0B79
            0B78
RTN4 0B7F 0B03
RTN4A OB85 OB8C OB8E
RTN4B
      0B87 0B84
RTN4C
      0B8B
            0B89 0B94 0BA7 0BB5
RTN5
      0B90 0B04
RTN6
      OB9A OB05
RTN7
      OBA5
            0B06
RTN8
      OBCC OBO7
RTN8A OBE3 OBDA OBEO
RTN8J
      OBEF
            0B D8
RTN8L 0B01 0BE4
RTN8M OBOE OBF1
RTN8N OBE1 OBDF
RTN9 0BF2 0B08
RTN9A. OCOB- OCOF
RTN9B 0C16 0C15
RTN9C OC19 OCOA
RTN9E OC2B OC1A
RTN9L 0C04 0C10 0C1F 0C2D
RTRYA 085C ODFO 0EOD 0E1F 0E2A
RTRYB 085D 0E30
RTTBL OAFF OAEB OAFO OAF9 OAFF
RT11A 0C3A 0C39
RT11B 0C3F 0C34
RT11C 0C4A 0C3E 0C43
RT11L 0C35 0C46 0C48 0C4C
RT12A 0C68 0C6E
RT12B OC6F OC6B
RT12D 0C85 0C79 0C84
RT12F 0C91 0C8B
```

| 2310 A/B | FUNCT: | | | | | | | 00 51 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | | PA: |
|------------|-----------------|---------------|-----------------|--------------|--------------|--------------|--------------|--------|---|---------------|--------------|-------------------------|----------------------|-----------------------|---------------------------------|
| | RT12G | 0C8D | | | | | | | | | | | | | |
| · | RT12L | 0C53 | 0099 | 5 | | | | | | | | | | | |
| | RT12Z RT910 | 0C51 0BF0 | | | | | | | | | | | | | |
| | R12CK | 0 C 9B | 0050 | 0063 | 3 OC70 | 0086 | OCA | 0CA8 | 3 | | | | | | |
| | S#B SECT | 0883 0F0E | 0E38 | 0E40 | 0E43 | 3 ÔEAI | L OEAS | 3 0EA4 | • 0EA6 | OEAT | 7 OEA8 | 0 E A | 9 0EB2 | 2 | |
| | SECTO | 0C14 | 0FA3 | OBA8 | OFEA | A B ORRI | ORFO | OC11 | 0016 | | | | | | |
| | SEEK | 0D30 | 0020 | 0023 | 3 OD24 | 00A7 | 7 ODBE | - 0011 | . 0010 | , | | | | | |
| | SEEKA SEEKB | 0037 0046 | | | 0068 | 0074 | ' | | | | | | | | |
| | SEEKC | 0D49 | | | | | | | | | | | | | |
| | SEEKD | 004A | | 0048 | } | | | | | | | | | | |
| | SEEKF SEEKG | 0D5B 0D70 | 004E 0D5F | | | | | | | | | | | | |
| | SETV | 08A9 | 0058 | | 0E 0E | 0F31 | | | | | | | | | |
| | SETVA SETVE | 0F20 0F2A | 0F30 | | | | | | | | | | | | |
| | SFTRD | 0870 | 08AA 0E03 | | | | | | | | | | | | |
| | SFTSK | 0860 | | ODA 3 | 3 | | | | | | | | | | |
| | SFTWR SKCNT | 0873 086C | 0EFF | 0F3E | : | | | | | | _ | | | | |
| | SMLNG | 000C | 0A3A | | • | | | | | | | | | | |
| | SNRES | 0844 | | OCCE | | | | | | | | | | | |
| | SNX IO START | 084A 012D | 0839 | OCEA | OAA3 OFCA | OAAA | OB2E | occo | 0001 | 005D | 0FF2 | OFF6 | OFF7 | OFFD |) |
| | STMAO | 0F6F | 0057 | 001 A | UICA | | | | | | | | | | |
| | STML STMLE | 0002 0CF7 | 0CF 8 08 A D | | | | | | | | | | | | |
| | STMLR | OCFC | | 0D02 | | | | | | | | | | | |
| | STMLS | 08 A C | OCB7 | | | OCE9 | 0000 | 0F51 | OFD7 | | | | | | |
| | STMSA STMSE | 0F86 0F6D | 0F77 08B0 | | | | | • | | | | | | | |
| | STMSG | 08AF | 0837 | 0A6A | 0A94 | OAB6 | 0AD3 | OAFC | 0B1 5 | 0B25 | 0B 38 | 084F | 0856 | OBEC | 0C5E |
| | | | 0004 | OC LE | OCBE | 0665 | OCDB | OCE4 | 0056 | 0061 | 0.D6.R | 0070 | 0.01 | ODBI | MARK |
| | | | UUDF | 0006 | 0E05 0F6F | 0112 | 0E1B | 0E26 | 0E56 | 0E64 | 0E8E | 0EBC | OEE7 | 0EF1 | 0F01 |
| | STMSX | OFD1 | OF6D | OF6E | 0F82 | 0FC3 | OFC9 | | | | | | | | |
| | SUMRY | 086A | 0A 3B | 0035 0F67 | 0058 | 0D60 | 0075 | 00A3 | 0 DB 3 | ODED | 0E03 | 0E28 | OECA | 0EF3 | OEFF |
| | SWO | 0802 | | | 0A70 | OAE2 | 0F18 | 0F22 | 0F33 | 0F35 | OFC1 | | | | |
| | SW1 SW2 | 0803 0804 | UAES | | | | | | | | 0.01 | | | | |
| | SW3 | 0805 | 0A43 | | | | | | | | | | | | |
| | ТВ | 08 7 F | 0835 | 0837 | 0A3F | 0 4 4 2 | 0A43 | 0A44 | 0A4C | 0A4E | 0A51 | 0A52 | 0A53 | 0A55 | 0A56 |
| | | | 0A57 | 0 A 5 8 | 0A 5B | 0A5D | 0A5E | 045F | 0460 | 0461 | 0462 | 0142 | 0444 | 0440 | 04/4 |
| | | | 07.00 | ~~~ | UMIU | VAID | UAIT | UAIO | U 4 / / | 114/8 | 110/1 | $0 \land 2 \Rightarrow$ | 0A85 0AAA | $\alpha \circ \alpha$ | $\alpha \bullet \alpha \circ c$ |
| | | | UABS | OAB6 | UAB8 | OAB9 | OARB | OARC | OARE | OARE | 0.00 | OAC1 | 0462 | 0464 | 0.4.0.5 |
| | | | UALY | UALL | UALU | UALE | 0A 03 | 0A05 | 0AF2 | OAF5 | $0\Delta EB$ | UVEO | OVEV | OAE2 | OACE |
| | | | 0825 | 0827 | OBZA | 0B2B | 0B2C | 0B20 | 0R2F | OR 2F | 0 B 3 O | 0821 | 0B1D 0B32 | 0022 | 0025 |
| | | | 0030 | 0056 | טכסט | 0840 | 0841 | ()K45 | ()R49 | NRAF | ARE 1 | ハロにつ | ABE2 | ODE (| 0050 |
| | | | 0000 | 0000 | 0000 | 8000 | 0870 | 08 7 6 | 0880 | 0882 | 0883 | OBSS | 0B86 0BC3 | OBR 7 | ORRA |
| | | | 0007 | ODCO | UDUL | 0800 | ORDI | 0803 | 0804 | OB O S | UBDO | 0800 | ADE1 | APES | ODE 4 |
| | | | OBLI | ODEO | UDEA | UBEL | ORFF | OBEZ | OREA | ORFR | ORFR | 0000 | 0.00 | O C O D | 0013 |
| | | | 0047 | UC TA | UU40 | UL4U | UL.4F | ひにちん | ひとを フー | ስር 5 ይ | ሰሮ ፍ ለ | $\Delta C E E$ | 0C40 0C61 | 0011 | 001 |
| | - | | 0013 | 0014 | 00.00 | 0077 | 06.78 | Ot. 7B | OC.7C | <u>በር</u> 7 F | ሰርጸሰ | ሰር ዕ 1 | $\Lambda \Gamma O A$ | 0007 | 00 00 |
| | | | UCOL | 0021 | ひしろと | 0699 | OLYA | 00.90 | OCA 1 | ስር ለ ጋ | ሰር አፍ | OCAC- | ACD7 | 0000 | 0.004 |
| - | | - | UUUL | 0000 | UCUI | ひしむと | 00.03 | OL OA | ሰር ከ7 | ለ ር ከ ል | ባር ቦል | V C D V | 0CC8 | 0001 | 0000 |
| The second | | | OCE | UCEO | ひしとろ | ULEA | OUEB | OUFF | OCE 9 | UCEC | りひりる | ሰሰ ሰሌ | ADAE | ADAE | AB11 **** |
| 11-21-5 | | | 0D1F 0D49 | UUDI | 0032 | UU 33 | UU 34 | いいべん | ロロスフ | กกรด | UD3 V | ひしまひ | VD2E | 6.51.1 | 00/7 |
| | - | | 0009 | UUGA | ODOB | UUBE | UU6F | 0070 | 0076 - | 0077 | 0076 | በ የ የ በ | 0D7E | 0003 | ADOR : |
| | | | 0099 | OD9A | 0D9C | 0D9D | 0D9E | ODA1 | ODA4 | ODAB | OOAE | 00B1 | ODB4 | 0 DB 5 | ODB6 |
| | | S. 44. 4. 5 | | 4.3 | | 2. | | | | | - | | | | |

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2310 A/B FUNCTION TEST

23

ZIPD 0A68 0895 0896 OA3B OA3E ZIPL 0A6D 0807 0A39 0A4B 0A4D 0A79 ZLPB 0476 0471 OBBE OASE OAB3 OCE6 OCE8 OCEF OCF5 ZRLOV ZRQOA OCAF OCB8 ZRQOV 08C1 0A50 0CAD 0C85 0CBD ZSNS 0848 OABF 081E 0B2C 0B2D 0B31 0B32 0C89 0C88 0CBE 0C00 004A 00D8 0EC4 7 X TD END DF ASSEMBLY

04NOV66 01DCT67 DATE 411875 415233 411913 411961

XEQX

XSKBK ZBUSY

ZCNT

ZEPA

ZIPA

ZIP8

ZIPC

OCE 8

0CB7

0887

OA7B

OA5B

0A65 0A64

OCDF 083C. 0AB9 0B1A 0D37

OCB1

0A38 0806 **0**A59

0895

OCC8 OCCA OCCF OCE1

0808 0A86 0A89 0AA0 0AA4 0AAE 0AE1

15FEB68 02DEC68 14NOV69 30JAN70 20MAR70 431319 431319A

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DATE 04NOV66 EC NO. 415233

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1443 FUNCTION TEST

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| | 6.1 6.2 | EDIT PROCEDURE SAMPLE PRINTOUTS | | | | | | | | | |
| 1. | PLRPOSE | | | | | | | | | | |
| | THE 14 1443 P | 43 FUNCTION TEST IS DESIGNED TO CHECK THE OPERATING PERFORMANCE OF TH RINTER AND TO AID IN ITS PROPER ADJUSTMENT. | | | | | | | | | |
| 2. | PRERECUISITES | | | | | | | | | | |
| | 2.1 | PROGRAM PREREQUISITES | | | | | | | | | |
| | | THIS PROGRAM MUST RUN UNDER CONTROL OF THE DIAGNOSTIC MONITOR. THE DIAGNOSTIC MONITOR PROGRAM USES 2,047 STORAGE WORDS, AND THIS PROGRAM USES 2047 STORAGE WORDS. | | | | | | | | | |
| | 2.2 | EQUIPMENT PREQUISITES | | | | | | | | | |
| | | THE PROGRAM IS DESIGNED FOR USE WITH A 52 CHARACTER TYPE BAR. SEE SAMPLE PRINTOUTS FOR ALL SIZES OF TYPE BARS. A CARRIAGE TAPE WITH ALL CHANNELS PUNCHED EQUALLY SPACED IN NUMERICAL ORDER IS NECESSARY FOR THE CARRIAGE TEST ROUTINE. THE CHANNEL PUNCHES SHOULD BE SPACED FOUR OR MORE LINES APART ON THE CARRIAGE TAPE. ANY SUCH TAPE WILL WORK WELL. SEE TABLE 4 FOR A SUGGESTED CARRIAGE TAPE. | | | | | | | | | |
| 3. | OPERAT | ING PROCEDURE | | | | | | | | | |
| | 3.1 | PROGRAM LOADING | | | | | | | | | |
| | | STANDARD LOADING PROCEDURE AS DESCRIBED IN THE DIAGNOSTIC MONITOR USE PROCEDURE. | | | | | | | | | |

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• 2 PROGRAM OPERATION

STANDARO MCNITOR OPERATING PROCEDURES APPLY.
THESE PROCEDURES ARE SUMMARIZED HERE. SEE DM USE PROCEDURE FOR DETAILS.

- 1. CLEAR STORAGE
- 2. LCAO CIAGNOSTIC MONITOR
- 3. SELECT MODE OF EXECUTION
- SELECT MONITOR CONTROL OPTIONS, IF DESIRED
 SELECT PROGRAM DPTIONS, IF DESIRED, FROM -

TABLE O PROGRAM CONTROL FUNCTION TABLE 1 ROUTINE SELECT FUNCTION TABLE 2 DEVICE SELECT FUNCTION

6. INSTRUCT MONITOR TO EXECUTE

TABLE D CONTROL FUNCTION
(SEE SECTION 5.2)

TABLE 1 ROUTINE SELECT FUNCTION (SEE SECTION 5.3)

* SENSE/PROGRAM * 2. SET PID IN SENSE/PROGRAM SWITCHES D AND 1. . D 1 2 3 4 5 6 7 . 3. SET DESIRED ROUTINE IN CATA ENTRY SWITCHES 11-15. * 4. PRESS CONSCLE INTERRUPT. * D 1 D D 1 O 1 O * DATA ENTRY SWITCHES • CESCRIPTION * C 1 2 3 4 5 6 7 8 9 1D 11 12 13 14 15 * 1.. READY - NOT BUSY D.. CONTINUITY RTN 2 . 1.. CARRIAGE BUSY - NOT BUSY RTN 3 · O D.. BIT LINE CHECK RTN 4 . D 1.. PARITY CHECK RTN 5 # C.. CYCLE STEAL PICKUP RTN 6 . the CYCLE STEAL DROP RIN 7 . D O. WORST CASE CORE A RTN 8 * 1 D D 1.. WORST CASE CORE B I 0.. CHARACTER COMPLIMENT RTN1D . 1 0 I 1.. REGISTRATION RTN11 * 1 1 0 0.. STRESS FEST RTN12 * 1 0 I.. CARRIAGE IMMEDIATE SPACE RTN13 1 1 1 D.. CARRIAGE SPACE AFTER PRINTING RIN14 . 1 1.. CARRIAGE IMMEDIATE SKIP RTM15 D O O.. CARRIAGE SKIP AFTER PRINTING RTM16

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TABLE 2 DEVICE SELECT FUNCTION

I. SET FUNCTION 10 IN SENSE/PROGRAM SWITCHES 0 AND 1.

SENSE/PROGRAM 2. SET PID IN SENSE/PROGRAM SWITCHES 2 THROUGH 7.

0 I 2 3 4 5 6 7 8 3. SET DESIRED DEVICE NUMBER IN DATA ENTRY SWITCHES 0-15.

4. PRESS CONSOLE INTERRUPT.

SEE SECTION 5.4

DATA ENTRY SWITCHES 0 OESCRIPTION

0 I 2 3 4 5 6 7 8 9 10 11 12 13 14 15 8

0. TEST 1443 NUMBER ONE.

3.3 PROGRAM HALTS

THIS PROGRAM HAS NO HALTS.

3.4 PROGRAM TERMINATION

A. STANDARO MONITOR TERMINATION

B. PROGRAM WILL FERMINATE AFTER ONE COMPLETE PASS.

4. PRINTOUTS

4.1 STATUS MESSAGES

STATUS MESSAGES ARE RECEIVED ONLY WHEN FORCE LOG OPTION IS USED. ALL STATUS MESSAGES ARE PRINTED IN ORDER OF OCCURANCE.

PID MIO RID RAD DSW

OAOO AOOI OOOX XXXX XXXX
PRINTER READY-CARRIAGE NOT BUSY STATUS

OAOO AOO2 QOOX XXXX XXXX
PRINTER READY STATUS

OAOO AOO3 OOOX XXXX XXXX CARRIAGE NOT BUSY STATUS

OAOO AOO4 OCOX XXXX XXXX

CARRIAGE BUSY-PRINTER BUSY, NOT READY STATUS

OAOO AOOS OOOX XXXX XXXX
PRINTER BUSY, NOT READY STATUS

OAOO AOO6 COOX XXXX XXXX CARRIAGE BUSY STATUS

0A00 A007 000X XXXX XXXX

CARRIAGE CHANNEL STATUS

OAOO AOO8 COO5 XXXX XXXX
OP COMPLETE PRINTER ERROR STATUS

CAOO AOO9 OOOX XXXX XXXX
TRANSFER CCMPLETE STATUS

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1443 FUNCTION TEST

OAOO AOOA OOOX XXXX XXXX
OP COMPLETE STATUS

OAOO AOOB OOOZ XXXX XXXX

DSW AFTER WORD CDUNT ZERO INITIALIZE WRITE.

4.2 ERROR MESSAGES

ERROR MESSAGES INDICATE THE ACTUAL OSW AND WHAT THE DSW SHOULD HAVE BEEN. THESE ARE THE LAST TWO WDRDS OF THE ERROR PRINTOUTS.

IF MORE THAN ONE ERROR IS DETECTED PER LINE OF OUTPUT. THE ERRORS PRINTED ARE NOT NECESSARILY IN THE ORDER THEY WERE DETECTED.

PID MID RID RAD DSW DSW SHOULD HAVE BEEN

OAOO EOO1 COOX XXXX XXXX XXXX
ERROR ON CHECKING PRINTER READY, CARRIAGE NOT BUSY

OAGO EGG2 COOX XXXX AXXX XXXX
ERROR CN CHECKING PRINTER READY.NOT BUSY

0A00 E003 COOX XXXX XXXX XXXX
ERROR ON CHECKING CARRIAGE NOT BUSY

QAOO EOO4 COOX XXXX XXXX XXXX

CARRIAGE BUSY, PRINTER BUSY, NOT READY ERROR

OAOO EOOS OOOX XXXX XXXX XXXX
PRINTER BUSY,NDT READY ERRDR

OAOO EOO6 GOOX XXXX XXXX XXXX CARRIAGE BUSY ERROR

OAGO EGOT GOOX XXXX XXXX XXXX CARRIAGE CHANNEL ERROR

OAOO EOOB OOOS XXXX XXXX XXXX

OP COMPLETE DSW ERROR (PRINTING BAD PARITY CHARACTERS)

OAOO EOO9 OOOX XXXX XXXX XXXX
TRANSFER COMPLETE DSW ERRDR

OAOO EOOA COOX XXXX XXXX XXXX OP COMPLETE DSW ERROR

OAOO EOOB OOOZ XXXX XXXX XXXX

WORD COUNT ZERO TRANSFER COMPLETE DSW ERROR. (THE DSW IMMOEIATELY
AFTER THE XIO INITIALIZE WRITE COMMAND)

OAOO EOOC COOX XXXX OOOO FALSE INTERRUPT DSW

OAOO EOOD OOOX XXXX 8000 LOST TRANSFER CCMPLETE INTERRUPT

OAGO EOOE OOOX XXXX 2000 LOST PRINTER COMPLETE INTERRUPT

5. COMMENTS

THE 1443 FUNCTION TEST CONSISTS OF SIXTEEN ROUTINES. IN THE PREFERRED MODE (THAT IS, WHEN NO DPTIONS HAVE BEEN SELECTED), ALL ROUTINES WILL BE RUN IN CROER.

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1443 FUNCTION TEST

5.1 THE PREFERRED KODE

WHEN NO OPTIONS ARE SPECIFIED BY THE OPERATOR THE PROGRAM WILL TEST 1443 NUMBER ONE. IF THE OPTIONAL SECOND 1443 IS TO BE TESTED IT MUST BE SELECTED (TABLE 2).

ALL ERRORS DETECTED WILL BE PRINTED IMMEDIATELY AFTER THE LINE WHERE IT WAS DETECTED. THE ERRORS ARE NOT NECESSARILY PRINTED IN THE ORDER DETECTED IF MORE THAN ONE PER LINE IS RECEIVED.

SHOULD THE OPERATOR WISH TO KNOW THE STATUS OF THE DEVICE AT SEVERAL TIMES DURING THE PRINT CYCLE, FORCE LOG OPTION SHOULD BE SPECIFIED. ALL LOG MESSAGES ARE PRINTED IN ORDER OF OCCURANCE.

5.2 CONTROL OPTIONS

A. SINGLE CYCLE

THIS OPTION WILL CAUSE THE 1443 TO TAKE A SINGLE PRINT CYCLE AND THEN HALT IN THE ROUTINE BEING EXECUTED. ALL OTHER PROGRAMS MAY CONTINUE TO RUN. THIS OPTION PROVIDES THE ABILITY TO SINGLE CYCLE THROUGH EACH LINE OF PRINT IN ANY ROUTINE.

B. FORCE LOG

THE FORCE LOG OPTION CAUSES OUTPUT OF THE DEVICE STATUS AFTER EACH LINE OF PRINT. THE DEVICE STATUS IS PRINTED IN THE ORDER DETECTED DURING THE LAST PRINT CYCLE.

5.3 ROUTINE SELECT OPTION

IF OTHER THAN THE BASIC ROUTINES ARE TO BE RUN OR IF A DIFFERENT ORDER OF RCUTINES IS DESIRED, THE OPERATOR MUST SPECIFY THE ROUTINE TO BE RUN AS IN TABLE 1. THE ROUTINE SPECIFIED AT LAST ENTRY WILL BE REPEATED UNTIL THIS OPTION IS CHANGED. WHEN THIS OPTION IS ZEROED THE REST OF THE ROUTINES WILL BE RUN IN SEQUENCE.

5.4 DEVICE SELECT OPTION

THIS OPTION NEED BE SPECIFIED ONLY IF THE SECOND 1443 IS TO BE TESTED. ONLY ONE 1443 IS TESTED AT A TIME. THIS OPTION MUST BE SPECIFIED BEFORE PROGRAM EXECUTION.

5.5 THE ROUTINES

A. ROUTINE 1

THE READY-NOT BUSY ROUTINE ASSURES THAT THE 1443 CAN BE MADE READY AND NOT BUSY THEN PRINTS A BLANK LINE SPACE SUPPRESSED. THE PRINTER SHOULD GO BUSY-NOT READY AND RETURN READY-NOT BUSY WHEN THE PRINTER COMPLETE INTERRUPT IS RECEIVED.

B. ROUTINE 2

THE CONTINUITY ROUTINE CHECKS THE CONTINUITY OF TRANSFER CIRCUITS THIS RCUTINE PRINTS WITH A WORD COUNT OF ZERO. TRANSFER COMPLETE SHOULD BE REQUESTED IMMEDIATELY IF THERE IS CONTINUITY BETWEEN THE PROCESS CONTROLLER AND THE 1443 ATTACHMENT. PRINTER COMPLETE INTERRUPT WILL BE REQUESTED WHEN THE 1443 BUFFER ADDRESS REACHES 197. IF NO PRINTER COMPLETE HAPPENS THE CONTINUITY BETWEEN THE 1443 AND ITS ATTACHMENT MAY BE QUESTIONED.

C. ROUTINE 3

THE CARRIAGE BUSY-NOT BUSY ROUTINE CHECKS THAT THE CARRIAGE BUSY INDICATOR FUNCTIONS PROPERLY. THIS IS ACCOMPLISHED BY ISSUEING SUCCESSIVE SPACE IMMEDIATE CONTROL COMMANDS.

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D. ROUTINE 4

THE BIT LINE ROUTINE PRINTS DATA IN ITS SIMPLEST FORM TO CHECK THE CONTINUITY OF THE PRINT CIRCUITS. ONLY SINGLE BIT CHARACTERS ARE PRINTED. THE DATA IS ROTATED THROUGH ALL PRINT POSITIONS.

E. RCUTINE 5

THE PARITY ROUTINE PRINTS SINGLE BIT CHARACTERS HAVING BAD PARITY TO CHECK THE PRINTER ERROR CIRCUITS. ONLY ONE BAD PARITY CHARACTER IS PRINTED PER LINE.

F. ROUTINE 6

THE CYCLE STEAL PICK-UP ROUTINE CHECKS THAT THE NUMBER OF CYCLE STEALS TO THE PRINTER DOES NOT EXCEED THE WORD COUNT. WHEN THE 1443 BUFFER ADDRESS REACHES 197. CYCLE STEALS ARE TERMINATED AND A PRINT CYCLE IS INITIATED. THE TRANSFER COMPLETE INTERRUPT IS A RESULT OF THE WORD COUNT REGISTER GOING TO ZERO. A WORD COUNT OF 9B SHOULD ALLOW THE PRINTER TO OPERATE NORMALLY. IF THE WORD COUNT REG FAILS TO DECREMENT OF AN EXTRA WORD IS SENT TO THE 1443. THE LINE PRINT CYCLE WILL START BEFORE WORD COUNT ZERO AND WILL BE DETECTED BY LOSS OF THE TRANSFER COMPLETE INTERRUPT.

G. ROUTINE 7

THE CYCLE STEAL DROP ROUTINE CHECKS TO SEE THAT NO CYCLE STEALS ARE OROPPED BY SPECIFYING A WORD COUNT OF 99. THIS ROUTINE SHOULD NOT DETECT A TRANSFER COMPLETE INTERRUPT. (SEE ROUTINE 5)

H. ROUTINES 8 AND 9

THE WORST CASE CORE ROUTINES CHECKS THE PRINTER CIRCUITS BY SPECIFYING CORE PATTERNS TO PLACE WORST CASE NOISE ON THE PRINTER CIRCUITRY.

I. ROUTINE 10

THE CHARACTER COMPLIMENT ROUTINE PRINTS EACH CHARACTER IN EVERY PRINT POSITION.

J. ROUTINE 11

THE REGISTRATION TEST PRINTS A FIELD OF I'S SUPERIMPOSED ON A FIELD OF H'S. THIS ROUTINE CAN BE USED AS AN AID IN ADJUSTING THE PRINT MAGNETS.

K. RCUTINE 12

THE STRESS TEST PRINTS THE 52 CHARACTER TYPE BAR IMAGE THUS IMPOSING A WORST CASE STRESS CONDITION ON THE TYPE BAR DRIVE MECHANISM.

L. ROUTINES 13, 14, 15 AND 16

THE CARRIAGE TEST ROUTINES CHECK THE FOUR CARRIAGE FUNCTIONS NOT PREVIOUSLY TESTED. THESE ARC SPACING IMMEDIATELY, SPACING AFTER PRINTING, SKIPPING TO CHANNEL IMMEDIATELY AND SKIPPING TO CHANNEL AFTER PRINTING, RESPECTIVELY. IF THE CHANNEL PUNCHES ARE EQUALLY SPACED AND PUNCHEO IN ORDER (1 THROUGH 12) ON THE CARRIAGE TAPE, THEN ALL ROUTINES WILL INDICATE THE PROPER SPACING BY THE ALIGNMENT OF THE SLASH ON THE PRINTOUT. ROUTINE 13 HAS ONE MORE SPACE BETHEEN LINES THAN DOES ROUTINE 14 DUE TO THE NORMAL SPACE AFTER PRINTING.

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TABLE 4 A SUGGESTED CARRIAGE TAPE

| TAPE | CHANNEL | |
|--------|-------------|--|
| COLUMN | PUNCH | |
| 1 | 1 | |
| 8 | 2 | |
| 15 | 3 | |
| 22 | 4 | |
| 29 | 5 | |
| 36 | 6 | |
| 43 | 7 | |
| 50 | 8 | |
| 57 | 9 | |
| 64 | 10 | |
| 71 | 11 | |
| 78 | 12 | |
| 85 | END DE TAPE | |

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APPEND IX

6.1 EDIT PROCEDURE

THE FOLLOWING EDIT PROCEDURE IS FOR CARD INPUT. THE EDIT PROCEDURE FOR PAPER TAPE INPUT IS LOCATED IN THE PAPER TAPE EDIT UTILITY PROGRAM DOCUMENTATION. THE PROPER EDIT CARDS MUST BE THE LAST CARDS IN THIS PROGRAM DECK. THE FOLLOWING FORMS ARE PROVIDED TO AID IN MANUALLY PREPARING THESE EDIT CARDS OR UPDATING EXISTING EDIT CARDS. IF IT IS NECESSARY TO FREFARE OR MODIFY EDIT CARDS, FILL IN THE NECESSARY DATA IN THE FORMS PRIOR TO PUNCHING THE CARDS. CARD COLUMNS THAT ARE SHADED SHOULD BE LEFT BLANK.

- DDEF STANDS FOR DEVICE DEFINITION EDIT FIELD. IT INCLUDES: 1. THE INTERRUPT LEVEL ASSOCIATED WITH THIS DEVICE (USE HEX NOTATION, 00-17).
 - 2. THE ILSW BIT POSITION ASSOCIATED WITH THIS DEVICE (USE HEX NOTATIONM O-F).

3. THE CHANNEL ASSIGNED TO THIS DEVICE (0-8). IF THIS IS A DPC DEVICE, PUNCH AN "F" IN THE CARD COLUMN.

THE LAST EDIT CARD IS THE "END EDIT CARD". THE INFORMATION IN THIS CARD INCLUDES: 1. AN "E" IN COLUMN 1.

ENTRY 1 ENTRY 2

2. THE PID FOR THIS PROGRAM (COL. 2-3).

| | | ENTRY 1 ENTRY 2 3. A TERMINATOR WORD OF "FFFF" (COL. 7-10). | |
|--------|--|--|----------|
| | | DDEF DDEF ENTRY 3 | |
| · | PROGRAM ID CARD SEQUENCE NUMBER NUMBER OF EDIT ENTRIES | INTERRUPT LEVEL (HEX) ILSW BIT (HEX) CHANNEL NUMBER INTERRUPT LEVEL (HEX) CHANNEL NUMBER NUMBER OF PRINT POSITIONS 78 FOR 120 90 FOR 144 * | |
| COLUMN | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 | 5 17 18 19 20 21 26 31 36 36 41 41 46 51 56 61 61 66 71 | |
| CARD 0 | E O A O O E D O O O O 3 | | Ħ |
| | | | |
| END | IE O A O O F F F F F | | \sqcap |
| | | | |
| | | | \Box |
| | | | Ħ |
| | | | Ħ |

CARD O CONTAINS THE DDEF'S FOR THE 1443 PRINTERS. IF THE SYSTEM HAS ONLY ONE 1443, THE DDEF FOR PRINTER NO. 2 SHOULD BE PUNCHED "FFFF". CARD END IS THE "END EDIT CARD". PUNCH EXACTLY AS IS SHOWN.

* NOTE 1 IF THIS SYSTEM HAS TWO 1443'S AND THEY EACH HAVE A DIFFERENT NUMBER OF PRINT POSITIONS, ENTER 90 IN CARD COLUMS 29-30.

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1443 FUNCTION TEST

SAMPLE PRINTOUT

THIS SAMPLE PRINTOUT ILLUSTRATES A 52 CHARACTER TYPEBAR.

8442211 --++86442211 --++86442211 --++88442211 --++86442211 --++86442211 --++8844221 442211 --++86442211 --++86442211 --++88442211 --++88442211 --++88442211 42211 --++88442211 --++88442211 --++88442211 --++88442211 --++88442211 2211 --++88442211 --++68442211 --++68442211 --++88442211 --++88442211 211 --++88442211 --++88442211 --++88442211 --++88442211 --++88442211 --+ 11 --++88442211 --++88442211 --++88442211 --++88442211 --++88442211 --++88442211 --+ 1 --++88442211 --++66442211 --++86442211 --++86442211 --++88442211 --+ ---+88442211 --++88442211 --++88442211 --++88442211 --++88442211 --++ --++88442211 --++88442211 --++86442211 --++8 --++88442211 --++88442211 --++88442211 --++88442211 --++88442211 --++88442211 -++88442211 --++88442211 --++88442211 --++88442211 --++88442211 --++88442211 ++88442211 --++88442211 --++88442211 --++88442211 --++88442211 --++88442211 +68442211 --++66442211 --++68442211 --++68442211 --++86442211 --++86442211 --++66442 88442211 --++88442211 --++88442211 --++88442211 --++88442211 --++88442211 --++88442211

PARITY

PROG ID

CYCLE STEAL PICK-UP CYCLE STEAL OROP WORST CASE CORE A

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IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM

PART NO. 2196384 PAGE 7

1443 FUNCTION TEST

SAMPLE PRINTOUT (CONT.)

NOTE: THIS SAMPLE PRINTOUT ILLUSTRATES A 52 CHARACTER TYPEBAR.

CHARACTER COMPLIMENT ABCDEFGH1JKLMNOPQRSTUVWXYZ +6-/xxx=..sa()++ 1234567890 1234567890 1234567890 A8COEFGHIJKLMNDPQRSTUVWXYZ +&-/xxx=..sa()** 1234567890 ASCDE A8CDEFGHIJKLMNDPQRSTUVWXYZ +&-/XI#=++\$a()** 234567890 1234567890 ABCDEF 34567890 A8CDEFGHIJKLMNOPQRSTUVWXYZ +6-/XU#=..\$2() ** 1234567890 ABCDEFG ABCDEFGHIJKLMNDPQRSTUVWXYZ +&-/XI#=..\$@()** 4567890 1234567890 **A8CDEFGH** 567890 A8COEFGHIJKLMNOPQRSTUVWXYZ +8-/xu#=+.\$a()** 1234567890 A8CDEFGH1 APCDEFGHIJKLMNDPQRSTUVWXYZ +8-/%##=+.sa()** 67890 1234567890 ABCDEFGHIJ 7890 ABCDEFGH1JKLMNDFQRSTUVWXYZ +&-/xx#=..sa()** 1234567890 A8C0EFGH1JK ABCDEFGHIJKLMNOPORSTUVWXYZ +6-/XU#=..sa()** ABCDEFGH1JKL 890 1234567890 ABCDEFGHIJKLMNDPQRSTUVWXYZ +&-/xx#=,.\$a()** 90 1234567890 A8COEFGHIJKLM ABCDFFGHIJKLMNBPGRSTUVWXYZ +8-/XH#=++\$a()+1 1234567890 ABCOEFGHIJKLMN ABCDEFGHIJKLMNOPQRSTUVWXYZ +8-/xm#=..sa() +* 1234567890 A8CDEFGH1JKLMND ABCOEFGHIJKLMNOPGRSTUVWXYZ +&-/xm#=..sa()** A8CDEFGHIJKLMNDP 1234567890 ABCDEFGHIJKLMNDPQRSTUVWXYZ +E-/xx#=..sa()+* 1234567890 ABCDEEGHIJKI MNDPO ABCDFFGHIJKLMNOPORSTUVWXYZ +E-/XI#=..Sa()** 1234567890 ASCDEEGHT JKI MNDPOR BCDEFGHIJKLMNDPQRSTUVWXYZ +8-/XI#=..SB()** 1234567890 ABCOEFGHIJKLMNOPORS COEFGHIJKLMNDPQRSTUVWXYZ +6-/x##=..sa()** 1234567890 **ABCOEFGHIJKLMNOPORST** DEFGH1JKLMNOPQRSTUVWXYZ +8-/%##=..\$a()** 1234567890 A8CDEFGHIJKLMNDPQRSTU EFGHIJKLMNCPGRSTUVWXYZ +8-/%###..sa()** 1234567890 **ABCOEFGHIJKLMNDPQRSTUV** FGHIJKLMNOPQRSTUVWXYZ +&-/XU#=+.\$a()+* 1234567890 A8CDEFGHIJKLMNOPORSTUVW GHIJKLMNOPORSTUVWXYZ +E-/XU#=,.\$2()** 1234567890 ABCDEFGHIJKLMNOPORSTUVWX H1JKLMNOPQRSTUVWXYZ +E-/XU#=..\$a()** 1234567890 A8CDEFGHIJKLMNDPORSTUVWXY +E-/%H#=..Sa()** I JKLMD UIVWXY7 1234567890 A8CDEFGHIJKLMNOPQRSTUVWXYZ +8-/%##=..\$@()** 1234567890 A8CDEFGHIJKLMNDPGRSTUVWXYZ +E-/X##=..\$@()** 1234567890 A8CDEF. **KLMNOPORSTUVWXYZ** /スロ#=••\$@()** 1234567890 ABC IOPORSTUVWXYZ *s*()*' **()62..=%P 1234567890 QRS TUVWXYZ (\$0()*1 1234567890 Sa()** 3+ ZYXWVU .sa()** **√**0#≥ 12345679 YZ +&-.\$0()** -/xu#=..sa 12345 +8-1 123 \$0()** +E-/X=#=,.Sa() 2()* 123456 +6-/XU#=,.5a()** ()** 1234567890 +E-/XU#=,.\$@()** WXYZ 1234567890 STUVWXYZ)** **() C2..= # II X \-3+ ** 1234567890 ABCD CRSTUVWXYZ +6-/%=*=..\$2()** ABCDEFG NDPORSTUVWXYZ +E-/x##=..\$a()** 1234567890 1234567890 ABCDEFGHIJKLMNDPQRSTUVWXYZ +&-/x#=..\$a()** 1234 ABCDEFGH1JKLMNDPQRSTUVWXYZ +6-/xx#=..sa()** 1234567890 12345 ABCDEFGHIJKLMNÖPORSTUVWXYZ +6-/XE#=,.50()** 1234567890 123456 ABCOEFGHIJKLMNDPQRSTUVWXYZ +E-/x##=..\$@()** 1234567690 1234567 1234567890 A8CDEFGH1JKLMNDPQRSTUVWXYZ +&-/xx#=..s@()** 12345678 A8CDEFGHIJKLMNDPQRSTUVWXYZ 1234567890 +8-/%##=,.\$@()** 123456789 ABCDEFGHIJKLMNOPQRSTUVWXYZ +&-/XI#=..sa()+1 1234567890 1234567890 1234567890 A8CDEFGHIJKLMNOPQRSTUVWXYZ +8-/%##=..\$@()** 1234567890 ABCDEFGHIJKLMNDPORSTUVWXYZ +8-/%##=,.\$@()** 1234567890 1234567890 A8CDEFGHIJKLMNDPQRSTUVWXYZ +&-/XI#=..\$@()** 1234567890 1234567890 1234567890 ABCDEFGHIJKLMNDPQRSTUVWXYZ +&-/XI#=..\$@()** 1234567890 ABCDEFGHIJKLMNDPQRSYUVWXYZ +&-/xu#=..sa()** 1234567890 1234567890 AB ABCOEFGHIJKLMNOPORSTU" #XYZ +6-/x##=++sa()++ 1234567890 1234567890 ABC

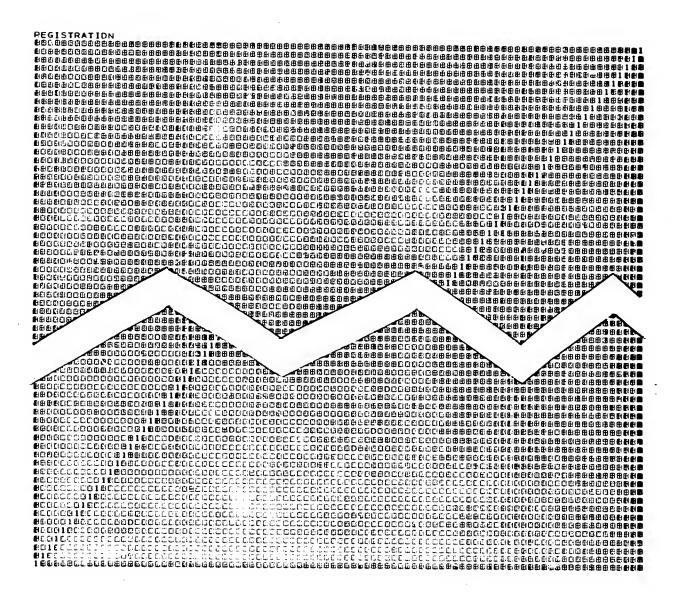
IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM

PART NO. 2196384 PAGE **7**A

1443 FUNCTION TEST

SAMPLE PRINTOUT (CONT.)

NOTE: THIS SAMPLE PRINTOUT ILLUSTRATES A 52 CHARACTER TYPEBAR.



DATE 28FEB66 4NOV66 EC NO. 415120 415233

PROG ID 080A-0 PAGE 7

DATE 28FEB66 4nov66 EC NO. 415120 415233

PROG ID 080A-0 PAGE 7A - PART NO. 2196384 PAGE

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1443 FUNCTION TEST

SAMPLE PRINTOUT (CONT.)

NOTE: THIS SAMPLE PRINTOUT ILLUSTRATES A 52 CHARACTER TYPEBAR.

28FEB66 4N0V66 415120 415233

PROG ID 0-A080 PAGE

THIS SAMPLE PRINTOUT ILLUSTRATES A 52 CHARACTER TYPEBAR. 3 SPACE IMMEDIATE SPACE **SPACE** 7 **SPACE** 5 PACE 2 EEEEEEEEEEEEEEEEEEEEEEEEEEEE 2 EEEEEEEEEEEEEEEEEEEEEEEEEEE 5 PACE EEEEEEEEEEEEEEEEEEEEEEEEEE 3 EEEEEEEEEEEEEEEEEEEEEEEE 3 EEEEEEEEEEEEEEEEEEEE / SPACE AFTER PRINT SPACE EEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE SPACE EEEEEEEEEEEEEEEEEEEEEEEEEEEEE SPACE EEEEEEEEEEEEEEEEEEEEEEEEEEEEEE EEEEEEEEEEEEEEEEEEEEEEEEEEEE / SPACE SPACE SPACE EEEEEEEEEEEEEEEEEEEEEEEEE SPACE SPACE 3 EEEEEEEEEEEEEEEEEEEEEEEEE 3 EEEEEEEEEEEEEEEEEEEEE / 4N0V66 28FEB66 EC NO. 415233 415120 PAGE

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM

PART NO. 2196384 PAGE

1443 FUNCTION TEST

SAMPLE PRINTOUT (CONT.)

I EEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE

EEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE

EEEEEEEEEEEEEEEEEEEEEEEEEEEEE

EEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE

2 EEEEEEEEEEEEEEEEEEEEEEEEEEE

2 EEEEEEEEEEEEEEEEEEEEEEEEE

PROG ID 080A-0

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM PART NO. 2196384 PAGE 1 1443 FUNCTION TEST SAMPLE PRINTOUT (CONT.)
CHANNEL 1 EEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE SKIP IMMEDIATE 7 1 3 CHANNEL 2 EEEEEEEEEEEEEEEEEEEEEEEEEE / 3 3 CHANNEL 3 EEEEEEEEEEEEEEEEEEEEE / 7 CHANNEL 4 EEEEEEEEEEEEEEEE /) CHANNEL 5 EEEEEEEEEEE / CHANNEL 6 EEEEEE / CHANNEL 8 EEEEEEEEEEEEEEEEEEEEEEEEE / CHANNEL 9 EEEEEEEEEEEEEEEEEEEEE / CHANNEL 10 EEEEEEEEEEEEEEEE / CHANNEL 11 EEEEEEEEEEE / • CHANNEL 12 EEEEEE / NOTE: THIS SAMPLE PRINTOUT ILLUSTRATES A 52 CHARACTER TYPEBAR. 28FEB66 4NOV66 EC NO. 415120 PROG ID 0-A080

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM PART NO. 2196384 PAGE 1443 FUNCTION TEST SAMPLE PRINTOUT (CONT.) SKIP AFTER PRINT CHANNEL 2 EEEEEEEEEEEEEEEEEEEEEEEEEEEEE / CHANNEL 3 EEEEEEEEEEEEEEEEEEEEE / CHANNEL 4 EEEEEEEEEEEEEEEE / CHANNEL 5 EEEEEEEEEEE / CHANNEL 6 EEEEEE / CHANNEL 8 EEEEEEEEEEEEEEEEEEEEEEEEEEEEEE CHANNEL 9 EEEEEEEEEEEEEEEEEEEEE / CHANNEL 10 EEEEEEEEEEEEEEEE / CHANNEL 11 EEEEEEEEEEE / CHANNEL 12 EEEEEE / NOTE: THIS SAMPLE PRINTOUT ILLUSTRATES A 52 CHARACTER TYPEBAR. 28FEB66 4N0V66 PROG ID PAGE 415120 415233 0**-**A080

|--|--|--|--|--|

| • | INTENANCE DIAGNOSTIC | PRDGR ≜M FOR | THE 1800 SYS | , TEM | PART ND. PAGE | 2196382 1 | (| NTENANCE DIAGNOSTIC | PROGRAM FOR | R THE 1800 SY | STEM : | | PART NO PAGE | 0. 2196382 1A |
|------------------|----------------------------------|------------------------|--|----------------------------|---------------------------|--------------|--------|----------------------------|-------------|---------------|----------------------|----------|-----------------------|------------------|
| 1443 FL | DUCTION 1521 | | | | | | (| | * | | | | 80A00700 | |
| | | * | | | 80A00020 | | | 082E 0 0000 | DSW4 DC | 0 | 1443 BUSY DSW | 10 | 80A00710 | |
| 1 | 012 C 0 | ******** BEGIN EQU | ************************************** | ******* | 00110000 | | | 0B2F 0 0000 | DC | 0 | DSW S/B | 11 | 80A00720 | |
| | 0120 0 012D 0 | START EQU | BEGIN&1 | | * 80A00040 * 80A00050 | | | 0B30 0 0007 0831 0 E3FF | DC DC | | EXPECTED | 12 | 80A00730 | |
| | 012E 0 | END EQU | START&1 | | * 80A00050 | | | 0031 0 E3FF | * | /E3FF | MASK | 13 | 80A00740 80A00750 | |
| (| 0 12F 0 | LDG EQU | END&1 | | * 80A00070 | | (; | 0832 0 0000 | DSW5 DC | 0 | PRINTER BUSY DSW | 14 | 80400760 | |
| • | 0130 0 | ERROR EQU | LDG&1 | | * 80A0080 | | / | 0B33 0 0000 | DC | 0 | DSW S/B | 15 | 80A00770 | |
| ſ | 0131 0 . 0132 0 | REQOV EQU RELDV EQU | ERRDR&1 REQDV&1 | | * 80A00090 * 80A00100 | | () | 0834 0 0003 0835 0 E3FB | DC | /0003 | EXPECTED . | 16 | 80A00780 | |
| 1 | | | | ***** | | | | 0033 0 2310 | DC * | /E3FB | MA SK | 17 | 80400790 | |
| , | | * | | | * 80A00120 | | | 0836 0 0000 | DSW6 DC | 0 | CARRIAGE BUSY DSW | 18 | 80A00800 80A00810 | |
| (| 0755 | * | V | | 80A00130 | | (| 0837 0 0000 | DC | 0 | OSW S/B | 19 | 80A00820 | |
| | 07FF | OR G | *&2047 | | 80A00140 80A00150 | | | 0838 0 0004 | DC | /0004 | EXPECTED | 1 A | 80A00830 | |
| ſ | | * | | | 80A00160 | | | 0839 0 E3FF | DC * | /E3FF | MASK | 1 B | 80A00840 | |
| ` | | * | | | 80A00170 | | | 083A 0 0000 | DSW7 DC | 0 | CARRIAGE STATUS | 10 | 80A00850 '80A00860 | |
| | 07FF 0 0A00 | PID DC | /0A00 | PRDGRAM ID | 80A00180 | | | 083B 0 0000 | DC | Ö | DSW S/B | iŏ | 80A00870 | |
| (| 0B00 0 0000 0801 0 0000 | RID DC RAD DC | 0 | RDUTINE ID RDUTINE ADDRESS | 80400190 | | (| 0830 0 0000 | DC | /0000 | EXPECTED | 16 | 08800A08 | |
| | 0802 0 0000 | SWO DC | 0 | CONTROL | 80A00200 80A00210 | | | 083D 0 FFF8 | DC * | /FFF8 | MASK | 1 F | 80A00890 | |
| (| 0803 0 0000 | SW1 DC | 0 | RDUTINE SELECT | 80A00220 | • | (| 083E 0 0000 | DSW8 DC | 0 | PRINTER ERROR DSW | 20 | 80A00900 80A00910 | |
| | 0804 0 0000 | SW2 DC | 0 | | 80A00230 | | | 083F 0 0000 | DC | 0 | OSW S/B | 21 | 80A00920 | |
| , | 0805 0 0000 0806 1 0894 | SW3 OC DC | O AGA IN | INITIALIZATION ADDR | 80A00240 80A00250 | | | 0840 0 6001 0841 0 E3FB | OC DC | /6001 | EXPECTEO | 22 | 80A00930 | |
| 1 | 0B07 1 0894 | DC | AGAIN | LDDP PRDGRAM ADDR | 80A00260 | | | 0041 0 23/8 | * | /E3FB | MASK | 23 | 80A00940 | |
| | 0808 1 0E2E | DC | ENDIT | END PROGRAM ADDRESS | 80A00270 | | | 0842 0 0000 | DSW9 DC | 0 | XFER COMPLETE DSW | 24 | 80A00950 80A00960 | |
| 1 | 0809 0 0000 | MLSCF DC | /0000 | CONTROL FIELD | 80A00280 | | | 0843 0 0000 | DC | 0 | DSW S/B | 25 | 80A00970 | |
| | 080A 0 FFFF 080B 1 OFFD | TERM DC DC | /FFFF PEND | LAST PROGRAM ADDRESS | 80A00290 80A00300 | | | 0844 0 B000 | DC | /8000 | EXPECTED | 26 | 80A00980 | |
| 1 | 080C 0 0000 | DC | 0 | LAST FRUGRAM ADDRESS | 80A00310 | | | 0845 0 A3F8 | DC * | /A3F8 | MA SK | 27 | 80A00990 | |
| | OB OD 0 0000 | • OC | 0 | | B0A00320 | | | 0846 0 0000 | DSWA DC | 0 | PTR CDMPLETE DSW | 28 | 80A01000 80A01010 | |
| | 080E 0 0000 | DC | 0 | | 80A00330 | | | 0B47 0 0000 | DC | ŏ | DSW S/B | 29 | 80A01010 | |
| , | 080F 0 0000 | DNLIN DC CDMP DC | *-* | DN LINE SWITCH | 80A00340 | | | 0848 0 2000 | , DC | /2000 | EXPECTEO | 2A | 80A01030 | |
| | 0810 0 0002 | | 2 ******* | CDMPATIBILITY SWITCH | | | | 0849 0 E3FB | DC * | /E3FB | MASK | 2B | 80A01040 | |
| | | * | | | 80A00370 | | | 0B4A 0 0000 | DSWB DC | 0 | | 2C | 80A01050 80A01060 | |
| | | * | | | 80A00380 | | | 0B4B 0 0000 | DC | Ō | DSW S/B | 2D | 80A01070 | |
| | | * | EDIT | T INFORMATION | 80A00390 | | | 084C 0 8007 | DC | /8007 | EXPECTED | 2E | 80A01080 | |
| | 0811 0 FFFF | DDEF1 DC | /FFFF | 1443 DEFINITION | 80A00400 80A00410 | | | 084D 0 E3FB | DC * | /E3FB | MASK | 2F | 80A01090 | |
| | 0812 0 FFFF | DDEF2 DC | /FFFF | 1443 DEFINITION | 80A00420 | | | 084E 0 0000 | DSWC DC | 0 | FALSE INTERRUPT | 30 | 80A01100 | |
| | 0813 0 0078 | SIZE DC | 120 | PRINTER SIZE | 80A00430 | | | 084F 0 0000 | DC | ŏ | DSW S/B | 31 | 80A01110 80A01120 | |
| | 0814 0 0034 | BAR DC | 52 | TYPE BAR SIZE | 80A00440 | | | 0850 0 0000 | DC | 0 | EXPECTED | 32 | 80A01130 | |
| 1 | 0816 0008 | | E 8 ******* | ***** | 80A00450 80A00460 | | | 0851 0 0000 | DC * | 0 | MASK | 33 | 80A01140 | |
| , | | * | | | 80A0047Ò | | | 0852 0 0000 | DSWD DC | 0 | LDST TRANSFER CMPLT | 34 | 80401150 | |
| | | * | | | 80A00480 | | | 0853 0 0000 | DC | ŏ | * INTERRUPT | 35 | 80A01160 80A01170 | |
| | | * | DAT | TA TABLES | 80400490 | | | 0854 0 0000 | o C | 0 | | 36 | 80A01180 | |
| | 081E 1 081E | DST DC | DST | | 80A00500 00 80A00510 | | | 0855 0 0000 | DC * | 0 | , | 37 | 80A01190 | |
| (| 081F 0 0000 | RPCNT DC | /0000 | | 1 80A00520 | | | 0856 0 0000 | DSWE DC | 0 | LDST PRINTER CMPLT | 38 | 80A01200 80A01210 | |
| | 0820 0 0000 | CYCNT DC | 0 | CYCLE COUNTER | 02 80A00530 | | | 0857 0 0000 | DC | o . | * INTERRUPT | 39 | 80A01210 | |
| | 0821 0 0000 | WACNT DC | 0 | WAIT CDUNTER | 03 80A00540 | | • | 0858 0 0000 | DC | 0 | | 3A | 80A01230 | |
| | 0822 0 0000 | DSW1 DC | 0 | 1443 READY DSW | 80A00550 04 80A00560 | | | 0859 0 0000 | DC * | 0 | | 3B | 80A01240 | |
| | 0823 0 0000 | DC | Ö | DSW S/B | 05 80A00570 | | | 085A 0 0000 | CNTRL DC | 0 | · CONTROL IDCC | 3C | 80A01250 | |
| | 0824 0 0000 | DC | /0000 | EXPECTEO | 06 B0A005B0 | | | 0B5B 0 0400 | DC | 70400 | CONTROL IDEC | 30 | 80A01260 80A01270 | |
| | 0825 0 E3FF | DC * | /E3FF | MASK | 07 80A00590 | | | 085C 1 0F14 | WRITE DC | BITS | INITIALIZE WRITE | 3E | 80A01280 | |
| 1 | 0B26 0 0000 | DSW2 OC | 0 | PRINTER READY DSW | 80A00600 08 80A00610 | | | 085D 0 0500 | DC * | /0500 | * IDCC | 3 F | 80A01290 | |
| 1 | 0827 0 0000 | DC | 0 , | DSW S/B | 09 80A00620 | | | 085E 0 0000 | XFDSW DC | 0 | XFER CMPLT DSW | 40 | 80A01300 80A01310 | |
| | 0B28 0 0000 | DC | /0000 | EXPECTED | OA 80A00630 | | | 085F 0 0700 | SENSD DC | /0700 | SENSE DSW - ND RESET | | 80A01310 | |
| (| 0829 0 E3FB | DC * | /E3FB | MASK | 0B 80A00640 | | | 0860 0 0000 | PRDSW DC | 0 | PTR CMPLT DSW | 42 | 80A01330 | |
| | 082A 0 0000 | DSW3 DC | 0 | CARRIAGE READY DSW | 80A00650 OC / 80A00660 | | | 0B61 0 0701 | SENSD DC | /0701 | SENSE DSW - RESET | 43 | 80A01340 | |
| (| 082B 0 0000 | DC | ő | DSW S/B | OD / 80A00670 | | | 0862 0 0000 | SWCMP DC | /0000 | SWO CDMPARE WDRD | 44 | 80A01350 | |
| * | 082C 0 0000 | DC | /0000 | EXPECTED | 0E 80A00680 | | | 0863 0 0400 | K0400 DC | /0400 | CDNSTANT | 44 45 | 80A01360 80A01370 | |
| 4 | 082D 0 E3FC | DC | /E3FC | MASK | OF 80A00690 | | • | | | | | | 30701310 | |
| (| | | | | | | | • | | | | | | |
| | | | | | | | | | | | | | | |
| (DATE EC ND. | 04NDV66 15JUN68 415233 411935 | 14NDV69 431319 | 20MAR70 431320 | | PRDG ID PAGE | 080A-1 | DATE | 04NDV66 15JUN68 | | 20MAR70 | | | PRDG ID | 0B0A-1 |
| EC NO+ | 717633 411733 | 731317 | 491960 | | PAGE | 1 | EC NO. | 415233 411935 | 431319 | 431320 | | | PAGE | 1A |
| ł. | | | | | | | | | | | | | | |

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| TON MATHICHANCE DIAGNOSTI | C PRDGRAM FDR T | HE 1800 SYSTE | M | | PART NO. 2196382 | IBM MAINTENANCE DIAGNOSTIC | PRDGRAM FDR | THE 1800 SYS | STEM | PART ND. 219 |
|---------------------------------|-----------------------|---|--------------------------------------|------------|----------------------------------|---------------------------------|----------------------|------------------|--------------------------|----------------------|
| 1443 FUNCTION TEST | | | , | | PAGE 2 | 1443 FUNCTION TEST | | | | PAGE |
| | | | | | | 1442 FONCTION 1521 | | | | |
| 0864 0 0100 | K0100 DC | /0100 | CDNSTANT | 46 | 80A013B0 | | * | | | 80A02060 |
| 0865 0 0200 | K0200 DC | /0200 | CONSTANT | 47 | 80A01390 | 0894 0 0000 | AGAIN DC | /0000 | | 80A02070 |
| 0866 0 0000 | SBANQ DC | 0 | SAVED ACC AND Q REGS | 4.0 | 80A01400 80A01410 | 0895 0 10A0 | SLT | 32 | CL 5.10 . 100 NCC . 1051 | 80A020B0 |
| 0867 0 0000 | DC | Ö | SAVED ACC AND & REGS | 49 | 80A01410 | 0896 0 6314 0897 1 DF00 0D72 | LDX AGIN1 STD | | CLEAR LDG MSG AREA | 80A02090 |
| 0868 0 0001 | ONE DC | 1 | CDNSTANT | 4 A | 80A01430 | 0899 0 73FE | MDX | 3 -2 | • | 80A02100 80A02110 |
| 0869 0 000F | MASK DC | /000F | MASK FOR RDUTINES | 4B | 80A01440 | 089A 0 70FC | MDX | AGIN1 | - | 80A02120 |
| 086A 0 001F | * * | (0015 | 0.000 | | 80A01450 | | * | | | B0A02130 |
| 086B 0 0010 | BASIC OC ALL DC | /001F | BASIC ROUTINES NUMBER OF ROUTINES | 4C | 80A01460 | 089B 0 6334 | LOX | | CLEAR ERROR AREAS | 80A02140 |
| 086C 0 0000 | KEEP OC | 0 | OONT RELEASE 1443 | 4D 4E | 80A01470 80A01480 | 089C 1 DF00 0822 089E 0 73FC | AGIN2 STO | | | 80A02150 |
| 086D 0 0101 | ONECH OC | / 0101 | CONSTANT | 4F | 80A01490 | 089F 0 70FC | MOX | AG IN2 | | 80A02160 80A02170 |
| | * | | | | 80A01500 | OBAO O DOCB | STO | KEEP | | 80A02170 |
| 086E 0 000C | KOOOC DC | /000C | CONSTANT 12 | 50 | 80A01510 | | * | | | 80A02190 |
| 086F 0 2100 0B70 0 2200 | SPAC1 DC SPAC2 OC | /2100 | ONE SPACE | 51 | 80A01520 | 08A1 1 6600 08BA | | L2 STARX | SET STARTING ADORESS | 80A02200 |
| 0871 0 2300 | SPACE OC | /2200 /2300 | TWO SPACE THREE SPACES | 52 53 | 80A01530 | 08A3 1 6E00 0809 | | L2 MLSCF | | 80402210 |
| 33.1 3 2300 | * | 72300 | THREE SPACES | 2 3 | 80A01540 80A01550 | 08A5 1 D400 0800 | * | L RID | INITIAL 175 010 | 80A02220 |
| 0872 0 1100 | WRSP1 DC | /1100 | SPACE AFTER PRINT | 54 | 80A01560 | 08A7 1 4C80 0894 | | I AGAIN | INITIALIZE RIO EXIT | 80A02230 80A02240 |
| 0873 0 3100 | WRSK1 DC | /3100 | SKIP AFTER PRINT | 55 | 80A01570 | 2000 2000 | | | ******** | 80A02250 |
| 0874 0 2100 | IMSP1 DC | /2100 | IMMEDIATE SPACE | 56 | 80A01580 | | * | | | 80A02260 |
| 0875 0 0011 | SLASH DC * | /0011 | | 57 | 80A01590 | | * | | | 80402270 |
| 0876 0 0000 | * STEP OC | /0000 | SPACING SIZE | ۲. | 80A01600 | | * | | | B0A022B0 |
| 00.0 0 0000 | | | ********* | 58 | 80A01610 | | * | ROU | JTINE ADORESS TABLE | 80A02290 |
| | * | | | • | 80A01620 80A01630 | 08A9 1 090F | RTABL OC | RTZ | | 80A02300 |
| | * | | | | 80A01640 | 08AA 1 0932 | DC | RT01 | | 80A02310 80A02320 |
| | * | | | | 80A01650 | 08AB 1 0947 | OC. | RT02 | | 80A02330 |
| | * | INTER | RUPT ROUTINE | | 80A01660 | 08AC 1 095B | DC | RT03 | | 80A02340 |
| 0877 0 0000 | INTSW DC | *-* | | | 80A01670 | 08A0 1 0984 | OC | RT04 | | 80A02350 |
| 0878 0 0000 | DVA DC | /0000 | | | 80A01680 80A01690 | 08AE 1 09BF 08AF 1 090F | DC OC | RT05 RT06 | | 80A02360 |
| | * | , , , , , | | | 80A01700 | 08B0 1 0A0D | 00 | RT07 | | 80A02370 80A02380 |
| 0879 0 0000 | INTRP DC | /0000 | | | 80A01710 | 08B1 1 0A1F | oč | RT08 | | 80A02390 |
| | * | | | | 80A01720 | 08B2 1 0A31 | OC | RT09 | | 80A02400 |
| 087A 0 08E6 087B 0 1000 | XID Nop | SENSO | SENSE OSW - RESET | | 80A01730 | 08B3 1 0A46 | OC | RTOA | | 80A02410 |
| 0076 0 1000 | * | | | | 80A01740 | 0884 1 0AA7 | DC | RTOB | | 80A02420 |
| 087C 1 4C10 0886 | BSC | L INTR1,- | BR IF NOT XFER CMPLT | | 80A01750 80A01760 | 08B5 1 0ABC 08B6 1 0AF1 | DC OC | RTOC RTOD | | 80A02430 |
| 087E O 18DO | RTE | 16 | on it was well out it | | 80A01770 | 08B7 1 0B2E | DC | RTOE | | 80A02440 80A02450 |
| 087F O CODE | ŁO | XFDSW | | | 80A01780 | 0888 1 0864 | DC | RTOF | | 80A02460 |
| 0880 0 F0E3 | EOR | K0100 | | | 80A01790 | 08B9 1 OBFC | LAST DC | RTZZZ | ENO OF PROGRAM | 80A02470 |
| 0881 1 4C20 088E 0883 0 18D0 | BSC | L INTRE,Z | BR IF SECONO INTRPT | | 80A01800 | | ***** | ***** | ******* | 80A024B0 |
| 0885 0 1800 0884 0 DOD9 | RTE Sto | 16 XFOSW | | | 80A01810 | | * | | | 80A02490 |
| 0885 0 700C | MDX | INTRX | EXIT | | 80A01820 80A01830 | | * | | | 80A02500 |
| | * | • | | | 80A01840 | | * | | | 80A02510 80A02520 |
| | * | | | | 80A01850 | | * | PRE | OGRAM START ROUTINE | 80A02530 |
| 0886 0 18D0 | INTR1 RTE | 16 | | | 80A01860 | | * | | | 80A02540 |
| 0887 0 COD8 0888 0 FODB | LD EOR | PRDSW | | | 80A01870 | 08BA 1 6600 081E | STARX LDX | | | 80A02550 |
| 0889 1 4C20 088E | EOR BSC | KO100 L INTRE,Z | BR IF SECOND INTRPT | | 80A01880 | 08BC 0 C2E6 | LD S.LA | 2 SW2-DST | • | 80A02560 |
| 088B 0 18D0 | RTE | 16 | OK IF SECOND INTRPT | | 80A01890 80A01900 | 08BD 0 1002 08BE 1 4C10 08C6 | S L A BS C | 2 L STAR1 | BD IE NOT DID TUO | 80A02570 |
| 088C 0 D0D3 | STO | PROSW | SAVE PTR CMPLT DSW | | 80A01900 80A01910 | 08C0 0 C2F4 | LD | 2 DDEF2-DS | BR IF NOT PTR TWO ST | 80A02580 80A02590 |
| 088D 0 7002 | MDX | INTRR | | | 80A01920 | 08C1 1 4C28 08C6 | | L STAR1,82 | | 80A02600 |
| | * | | | | 80A01930 | 08C3 1 6700 0812 | | L3 ODEF2 | | 80A02610 |
| | | | | | | | | | | |
| 0005 0 1000 | * | • . | | | 80A01940 | 08C5 0 7007 | MDX | STAR2 | | 80A02620 |
| 088E 0 18D0 088F 0 DOBE | * INTRE RTE STO | 16 DSWC | SAVE ERRDR MESSAGE | | 80A01940 80A01950 80A01960 | 08C5 0 7007 08C6 0 C2F3 | MDX * STAR1 LD | STAR2 2 DOEF1-DS | ·- | |

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STO

INTRX BSC I INTRP

16 INTSW

CLEAR INTERRUPT SWITCH

EXIT

INITIALIZATION ROUTINE

0890 0 1010 0891 0 D0E5

0892 1 4C80 0879

PROG ID 0804-1 PAGE

80A01980 **80A01**990

80A02000

80A02010

80A02020

80A02030 80A02040

80A02050

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08C7 1 4C28 0E3F 08C9 0 4CA8 012E

08CB 1 6700 0811

08CO 1 6F00 0E10

08CF 1 6F00 0DFD

08D1 1 6F00 0E3B

STAR1 LD 2 DOEF1-DST

8SC L DEND,&Z END IF EDIT ERROR
BSC I END,&Z END IF NOT THERE

LDX L3 DDEF1

STAR2 STX L3 GETAD STX L3 DRAO STX L3 ENDAO

> 0B0A-1 2A PROG ID PAGE

80A02650 80A02660

80A02670 80A02680 80A02690

80A02700

80A02710 80A02720 80A02730

|--|--|--|--|

| • | PRDGRAM FDR THE 1800 SYSTEM | PART ND. 2196382 PAGE 3 | IBM MAINTENANCE DIAGNOSTIC PROGRAM FDR THE 1800 SYSTEM | PART NO. 219 |
|--------------------------------------|---|----------------------------|--|----------------------|
| NCTIDN TEST | | | 1443 FUNCTION TEST | PAGE |
| 0803 1 4400 0E06 | BSI L GETDE REQUEST USE DF 1443 | 80A02740 | | 1 |
| 0805 0 C245 | LD 2 K0400-0ST | 80A02750 | * | 80A03420 |
| 08D6 0 EA5A | DR 2 DVA-OST | 80A02760 | * THIS ROUTINE PRINTS TEN | 80A03430 |
| 08D7 0 D230 | STD 2 CNTRL&1-DST CONTRDL IDCC | 80A02770 | * LINES DF NDTHING SPACE | 80A03440 |
| 0808 0 EA46 | DR 2 K0100-0ST | 80A02780 . | SUPRESSED. IT CHECKS | 80A03450 |
| 08D9 0 D23F 080A 0 EA47 | STD 2 WRITE&1-OST WRITE IOCC OR 2 KO2OO-DST | 80A02790 | * THAT THE 1443 CAN 8E | 80A03460 |
| 08DB 0 D241 | STO 2 SENSO-DST SENSE - NO RESET | 80A02800 | * MADE READY, GOES BUSY | 80A03470 |
| 08DC 0 824A | A 2 ONE-OST | 80A02810 | * ANO NOT READY, ISSUES | 80A03480 |
| 08DD 0 D243 | STD 2 SENSO-OST SENSE - RESET IOCC | 80A02820 80A02830 | * A PRINT COMPLETE * INTERRUPT AND RETURNS | 80A03490 |
| 08DE 1 4400 ODF 3 | 8SI L OROPD RELEASE DEVICE | 80A02840 | * TO READY. | 80A03500 |
| | ************ | 80A02850 | * | 80A03510 80A03520 |
| | * | 80A02860 | 090F 0 6500 0090 RTZ LDX L1 144 CLEAR DUTPUT AREA | 80A03530 |
| | * | 80A02870 | 0911 0 1010 SLA 16 | 80A03540 |
| | * | 80A02880 | 0912 1 0500 0F14 RTZ1 STD L1 BITS | 80A03550 |
| | * PRINTER ROUTINE CONTROLLER | 80A02890 | 0914 0 71FF MDX 1 -1 0915 0 70FC MOX RT71 | 80A03560 |
| 08E0 1 6600 0015 | # DCON LOV 12 DCT | 80402900 | 0915 0 70FC MOX RTZ1 | 80A03570 |
| 08E0 1 6600 081E 08E2 1 6500 0D74 | PCON LOX L2 DST | 80A02910 | 0916 0 6500 0069 | 80A03580 |
| 08E4 1 6000 0061 | LDX L1 MSGAR&2 RESET LDG AREA STX L1 QLDG1&1 | 80A02920 | 0918 1 6000 0F14 | 80A03590 |
| 08E6 0 610A | | 80A02930 | * | 80A03600 |
| 08E7 1 6D00 0820 | LOX 1 10 SET CYCLE CDUNTER STX L1 CYCNT | 80A02940 80A02950 | 091A 0 C24A LO 2 DNE-DST | 80A03610 |
| | * | 80A02960 | 0918 0 EA3F OR 2 WRITE&1-OST SET SPACE SUPRES | 80A03620 80A03630 |
| 08E9 0 C2E5 | LO 2 SW1-DST ASSURE PROPER ENTRY | 80A02980 80A02970 | 091C 0 D23F STD 2 WRITE&1-0ST | 80A03630 80A03640 |
| 08EA 0 D244 | STD 2 SWCMP-OST | 80A02980 | * | 80A03650 |
| 08EB 0 E24C | ANO 2 BASIC-DST | 80A02990 | 091D 0 6101 LDX 1 1 | 80A03660 |
| 0950 0 9315 | * | 80A03000 | 091E 1 4400 0C50 BSI L PTRDY CHECK PRINTER READY | 80A03670 |
| 08EC 0 B24D | CMP 2 ALL-DST CHECK FDR PRDPER RTN | 80A03010 | 0920 1 4400 OCAC BSI L PRINT PRINT NDTHING | 80A03680 |
| 08E0 0 E24B 08EE 0 1000 | AND 2 MASK-DST RTN TDD LARGE | 80A03020 | 0000 0 (104 | 80A03690 |
| 08EF 0 4820 | NDP | 80A03030 | 0023 1 4400 0024 | 80A03700 |
| 08F0 0 02E2 | BSC Z SET RDUTINE ID STD 2 RIO-OST | 80A03040 | 0923 I 4400 OD3A BSI L CKPTR CK PRINTER CMPLT 0925 O C23F LD 2 WRITE&1-DST | 80A03710 |
| 55. 5 5 5222 | * | 80A03050 | 0926 0 1801 SRA 1 | 80A03720 |
| 08F1 1 6580 0800 | LDX I1 RID UPDATE THE RIO | 80A03060 80A03070 | 0927 0 1001 SLA 1 | 80A03730 |
| 08F3 0 4818 | BSC &- INDEX IF ND LDDP | 80A03080 | 0928 0 023F STD 2 WRITE&1-DST | 80A03740 |
| 08F4 0 7101 | MOX 1 1 | 80A03090 | 0929 I 4400 ODC2 BSI L ERRIT PRINT ANY ERRORS | 80A03750 80A03760 |
| | * | 80A03100 | 0928 I 4400 0093 BSI L LDGIT LDG ANY ERRORS | 80A03770 |
| 08F5 1 6000 0800 | STX L1 RID SET RTN ND AND AODR | 80A03110 | 0920 1 74FF 0820 MDX L CYCNT,-1 SKIP IF RTN DDNE | 80A03780 |
| 08F7 1 C500 08A8 | LD L1 RTABL-1 | 80A03120 | 092F 0 70DF MDX RTZ | 80A03790 |
| 08F9 0 02E3 | STD 2 RAD-DST | 80A03130 | 0930 1 4C00 08E0 BSC L PCDN | 00402000 |
| 08FA 1 4D80 08A8 | * BSC I1 RTABL-1 EXIT TO ROUTINE | 80A03140 | ********* | 80A03810 |
| 001 A 1 4000 00A0 | BSC II RTABL-1 EXIT TO ROUTINE | 80A03150 | * | 80A03820 |
| | * | 80A03160 | * | 80A03830 |
| 08FC 1 4400 OCCC | RTZZZ 8SI L SE8IT SET ENO PRDG MESSAGE | 80A03170 80A03180 | * RDUTINE TWD | 80A03840 |
| 08FE 0 0014 | DC 20 | 80A03180 80A03190 | * | 80A03850 80A03860 |
| 08FF 1 0E66 | OC BLANK | 80A03200 | * CDNT INUITY | 80A03860 80A03870 |
| 0900 0 0001 | DC 1 | 80A03210 | * | 80A03880 |
| 0001 1 //00 0005 | * | 80A03220 | * THIS ROUTINE PRINTS WITH | 80A03890 |
| 0901 1 4400 OCCC | BSI L SEBIT SET END PRDG MESSAGE | 80A03230 | * A WDRO CDUNT DF ZERD. | 80A03900 |
| 0903 O FFFA 0904 1 0E98 | 0C -6 DC EDT | 80A03240 | * TRANSFER CDMPLETE INTRPT | 80A03910 |
| 0905 0 0006 | DC EDT DC 6 | 80A03250 | * WILL 8E REQUESTED | 80A03920 |
| 0.00 0 0000 | * | 80A03260 | * IMMEDIATELY IF THERE IS | 80A03930 |
| 0906 1 4400 OC7B | BSI L HDNG PRINT END DF TEST | 80A03270 80A03280 | * CDNTINUITY BETWEEN THE * PC AND THE 1443. PRINTER | 80A03940 |
| | * | 80A03280 80A03290 | * COMPLETE INTERRUPT WILL | |
| 0908 0 6101 | LDX 1 1 | 80A03390 | * CDME ALDNG WHEN THE 1443 | 80403960 |
| 0909 1 4400 0C50 | BSI L PTROY AWAIT READY | 80A03310 | * 8UFFER REACHES ADORESS | 80A03970 80A03980 |
| 0908 1 4400 00F3 | BSI L DRDPD RELEASE THE 1443 | 80A03320 | * 197. IF NO PRINTER | 80403980 |
| 0000 0 /000 0100 | * | 80A03330 | * COMPLETE DCCURS THE | 80A04000 |
| 0900 0 4C80 012E | 8SC I END END DF TEST | 80A03340 | * CDNTINUITY SETWEEN THE | 80A04010 |
| | *********** | 80A03350 | * 1443 ANO THE ATTACHMENT | 80A04020 |
| | ↑ | 80A03360 | * MAY 8E QUESTIDNED. | 80A04030 |
| | * | 80A03370 | 0932 0 1010 RT01 SLA 16 ZERD WORD COUNT | 80A04040 |
| | * POUTING ONE | 80A03380 | ZEKO WOKO CDONI | 80A04050 |
| | * RDUTINE DNE * | 80A03390 | 0933 1 D400 OF14 STD L BITS 0935 0 6102 RT01A LDX 1 2 | 80A04060 |
| | * READY / NDT BUSY | 80A03400 | 0936 1 4400 0C50 BSI L PTROY PRINTER READY | 80A04070 |
| | KEAUT / NUI BUSY | 80A03410 | 0938 0 6108 LDX 1 /8 | 8 0 A04080 |

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| NTENANCE DIAGNOSTI | PROGRAM FOR THE 1800 SYSTEM | PART NO. 2196382 PAGE 4 | IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM | PART NO. 219 PAGE |
|---|---|--|---|--|
| INCTION TEST | | PA GE 4 | 1443 FUNCTION TEST | · // 02 |
| 0939 1 4400 OCAC 093B 0 610A 093C 1 4400 OD3A 093E 1 4400 ODC2 0940 1 4400 OD93 | BSI L PRINT PRINT ONE LINE LDX 1 10 BSI L CKPTR CK PRINTER CDMPLETE BSI L ERRIT PRINT ANY ERRORS BSI L LOGIT LOG ANY MESSAGES | 80A04100 80A04110 80A04120 80A04130 80A04140 | 0968 0 1801 SRA 1 0969 1 D400 0F14 STO L BITS 096B 0 630E LDX 3 14 096C 1 6F00 0820 STX L3 CYCNT 096E 1 4400 0CB9 RTO3A BSI L RDTA ROTATE OUTPUT CHARS | 80A04780 80A04790 80A04800 80A04810 80A04820 |
| 0942 1 74FF 0820 0944 0 70F0 0945 1 4C00 08E0 | MDX L CYCNT,-1 SKIP IF RTN DONE MDX RT01A BSC L PCON EXIT TO NEXT ROUTINE | 80A04150 80A04160 80A04170 80A04180 | 0970 0 6102 LDX 1 2 0971 1 4400 0C50 BSI L PTRDY CHECK PRINTER READY 0973 1 4400 0CAC BSI L PRINT PRINT LINE 0975 0 6109 LDX 1 9 | 80A04830 80A04840 80A04850 80A04860 |
| | * ************************************ | | 0976 1 4400 0D14 BSI L CKXFR CHECK TRASNFER CMPLT 0978 0 610A LDX 1 10 0979 1 4400 0D3A BSI L CKPTR CHECK PRINTER CMPLT 0978 1 4400 0DC2 BSI L ERRIT PRINT ANY ERRDRS | 80A04870 80A04880 80A04890 80A04900 |
| • | * * ROUTINE THREE | 80A 0423 0 80A0 424 0 | 097D 1 4400 0D93 BSI L LDGIT LOG ANY MESSAGES 097F 1 74FF 0820 MDX L CYCNT,-1 SKIP IF RTN DONE 0981 0 70EC MDX RT03A | 80A04910 80A04920 80A04930 |
| | * * CARRIAGE BUSY * | 80A04250 80A04260 80A04270 | 0982 1 4C00 08E0 | 80 A0494 0 80 A049 50 |
| · | * THIS ROUTINE CHECKS THAT * THE CARRIAGE BUSY * INDICATOR FUNCTIONS | 80A04280 80A04290 80A04300 80A04310 | * * * * * * * * * * * * * | 80A04960 80A04970 80A04980 80A04990 |
| 0947 0 6103 0948 1 4400 0C50 | * PROPERLY * * * * * * * * * * * * * * * * * * | 80A04310 80A04320 80A04330 80A04340 | * * PARITY CHECK * | 80A05000 80A05010 80A05020 |
| 094A 0 C251 094B 0 D23C | * LD 2 SPAC1-DST SET TO SINGLE SPACE STO 2 CNTRL-OST | 80A04350 80A04360 80A04370 | <pre># THIS ROUTINE CHECKS THAT # THE PRINTER CIRCUITRY # WILL RESPOND TO BAD # PARITY CHARACTERS.</pre> | 80A05030 80A05040 80A05050 80A05060 |
| 094C 0 6104 0940 1 4400 0C95 094F 0 610A | * LDX 1 4 BSI L FORMS PERFORM SPACING LDX 1 10 SET X1 CTRL | 80A04380 80A04390 80A04400 80A04410 80A04420 | 0984 1 4400 OCCC RT04 BSI L SEBIT SET UP HEADING 0986 0 0003 DC 3 0987 1 0E54 DC PAR | 80A05070 80A05070 80A05080 80A05090 80A05100 |
| 0950 1 4400 0D3A 0952 1 4400 0DC2 | BSI L CKPTR GO CK PRNTR * BSI L ERRIT PRINT ANY ERRORS BSI L LOGIT LOG ANY MESSAGES | 80A04420 80A04430 80A04440 80A04450 | 0988 0 0003 DC 3 * 0989 0 1810 * SRA 16 INITIALIZE PARITY | 80A05110 80A05120 80A05130 |
| 0954 1 4400 0D93 0956 1 74FF 0820 0958 0 70EE 0959 1 4C00 08E0 | MDX L CYCNT,-1 SKIP IF DONE MDX RTO2 BSC L PCON | 80A04460 80A04470 80A04480 | 098A 0 92EC S 2 TERM-DST * DATA GENERATION 098B 0 0009 STD BLNCT | 80A05140 80A05150 80A05160 |
| | * ** ** ** ** ** ** ** ** ** ** ** ** * | 80A04490 80A04500 80A04510 | 098C 1 4400 0C7B | 80A05170 80A05180 80A05190 |
| | * * ROUTINE FOUR * * BIT LINE | 80A04520 80A04530 80A04540 80A04550 | 098F 0 D202 STO 2 CYCNT-DST 0990 1 6700 0E58 RT4I3 LDX L3 PARK 0992 0 6B08 STX 3 PACNT | 80A05200 80A05210 80A05220 80A05230 |
| | * * * * * * * * * * * * * | 80A04560 80A04570 80A04580 80A04590 | 0993 1 4400 OCCC SETPA BSI L SEBIT 0995 0 0000 BLNCT DC 0 - 120 %WC¤ 0996 1 0E66 DC BLANK 0997 0 0001 DC 1 | 80A05240 80A05250 80A05260 80A05270 |
| | * IN ITS SIMPLEST FORM. * SINGLE BIT CHARACTERS * ARE ROTATED THROUGH ALL * PRINT POSITIONS. | 80A04600 80A04610 80A04620 80A04630 | 0998 1 4400 OCCC BSI L SEBIT 099A 0 FFFF DC -1 099B 0 0000 PACNT DC 0 %PARKE 099C 0 0001 DC 1 | 80A05280 80A05290 80A05300 80A05310 |
| 0958 1 4400 OCCC 095D 0 0005 | * RTO3 BSI L SEBIT SET UP HEADING OC 5 | 80A04640 80A04650 80A04660 80A04670 | * 099D 0 6102 LOX 1 2 099E 1 4400 0C50 BSI L PTROY PRINTER READY 09AO 1 4400 0CAC BSI L PRINT PRINT ONE LINE | 80A05320 80A05330 80A05340 80A05350 |
| 095E 1 0E49 095F 0 0005 | DC BLINE DC 5 | 80 A04 680 80 A04 690 | 09A2 0 6109 | 80A05360 80A05370 80A05380 |
| 0960 1 4400 0C7B | BSI L HDNG PRINT HEADING * BSI L SEBIT SET UP ROUTINE DATA | 80A04700 80A04710 80A04720 | 09A6 1 4400 0D3A BSI L CKPTR CK PRINTER CMPLT * 09A8 1 4400 0DC2 BSI L ERRIT PRINT ANY ERRORS | 80A05390 80A05400 80A05410 |
| 0964 0 0090 0965 1 0E4D 0966 0 0007 | DC 144 OC BILK OC 7 | 80A04730 80A04740 80A04750 | 09AA 1 4400 0D93 BSI L LOGIT GO LOG MESSAGES | 80A05420 80A05430 80A05440 |
| 0967 0 C2F5 | * LD 2 S1ZE-OST | 80A04760 80A04770 | 09AC 0 COEE LD PACNT 09AD 0 92EC S 2 TERM-DST | 80A05440 80A05450 |

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| (| (| (| (| (| (| (| (| 1 | (| (| (| (| (| (| (| (| 1 | (| (| (| (| | (| (|
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|---|
| | | | | | | | | | | | | | | | | 3 | | | | | | | | |

| 0981 1 746 0820 | | PA GE 5 |
|--|--|------------------------------|
| 0946 0 1006 0 4820 0 981 0 7061 1 7460 0 810 0 811 4 15 0 80005-70 0 900 0 7062 0 7062 0 981 0 7061 | | |
| 0980 0 4820 | MDX L CYCNT,-1 SKIP IF RTN DONE | 80A06140 |
| 0981 0 70E1 MIX SETPA 80A05-90 0982 1 74F6 0262 MIX RTORE 90A05-90 0983 1 74F0 0262 MIX RTORE 90A05-90 0984 0 700 0986 0 700 0987 0 7400 0988 0 7400 0888 0 7400 0 | MDX RT05A | 80A06150 |
| ## MOX L CYCHT -2 SKIP IF RTN DONE | BSC L PCON EXIT TO NEXT ROUTINE | 80A06160 |
| 0982 1 74F6 0820 0986 1 4C00 0860 0987 1 4C00 0860 0987 1 4C00 0860 0987 1 4C00 0860 0987 1 4C00 0860 0987 1 4C00 0860 0987 1 4C00 0860 0987 1 4C00 0860 0988 1 14C0 0860 098 | * | 80A061 70 80A06180 |
| 0985 1 7400 0850 | * | 80406180 |
| ## TO4C MDX L BLNCT.1 | * | 80406200 |
| 0987 1 7401 0995 | * | 80A06210 |
| 0989 0 COEL LD PACKT 80A05560 | * ROUTINE SEVEN . | 80A06220 |
| 0988 1 0903 | * | 80A06230 |
| 098B 1 4C28 9993 | * CYCLE STEAL DROP | 80A06240 |
| 0980 0 7002 | * THIS ROUTINE CHECKS THAT | 80A06250 |
| ### ### ### ### ### ### ### ### ### ## | * THE WORD COUNT REG IS | 80A06260 80A06270 |
| ************************************** | * NOT DECREMENTED TOO | 80A06280 |
| * * * * * * * * * * * * * * * * * * * | * RAPIDLY. | 80A06290 |
| * ROUTINE SIX 80A05-60 | * | 80A06300 |
| *** ROUTINE SIX 80A05650 *** ROUTINE SIX 80A05660 *** ROUTINE SIX 80A05680 *** CYCLE STEAL PICK-UP 80A05770 *** CYCLE STEAL PICK-UP 80A05710 *** THIS ROUTINE CHECKS THAT 80A05710 *** THIS ROUTINE CHECKS THAT 80A05710 *** THE NUMBER DE CYCLE 80A05730 *** COUNT, CSSS ATE ENDED 80A05730 *** COUNT, CSSS ATE ENDED 80A05730 *** COUNT, CSSS ATE ENDED 80A05730 *** COUNT, CSSS ATE ENDED 80A05740 *** PRINT CYCLE WHEN THE 80A05780 *** PRINT CYCLE WHEN THE 80A05780 *** BUFFER ADDRESS REACHES 80A05780 *** BUFFER ADDRESS REACHES 80A05780 *** BUFFER ADDRESS REACHES 80A05780 *** IF THE WORD COUNT OF 98 WILL 80A05800 *** IF THE WORD COUNT REG 80A05800 *** IF THE WORD COUNT REG 80A05800 *** FAILS TO DECREMENT OR AN 80A05800 *** FAILS TO DECREMENT OR AN 80A05800 *** FAILS TO DECREMENT OR AN 80A05800 *** FAILS TO DECREMENT OR AN 80A05800 *** CYCLE WILL START BEFORE 80A05800 *** CYCLE WILL START BEFORE 80A05900 *** OFF 0 6102 *** WE IS ZERO AND MILL BE 80A05900 *** OFF 0 6104 *** WE IS ZERO AND MILL BE 80A05900 *** OFF 0 6104 *** WE IS ZERO AND MILL BE 80A05900 *** OFF 0 6104 *** WE IS ZERO AND MILL BE 80A05900 *** OFF 0 6104 *** WE IS ZERO AND MILL BE 80A05900 *** OFF 0 6104 *** | * A WORD COUNT OF 99 IS | 80A06310 |
| ** ROUTINE SIX 80A05670 ** ROUTINE SIX 80A05670 ** ROUTINE SIX 80A05670 ** CYCLE STEAL PICK-UP 80A05590 ** CYCLE STEAL PICK-UP 80A05590 ** THIS ROUTINE CHECKS THAT 80A05710 ** THE NUMBER OF CYCLE 80A05740 ** STEALS TO ITHE PRINTER 80A05740 ** CYCLE STEAL PICK B0A05740 ** STEALS TO ITHE PRINTER 80A05740 ** CYCLE STEAL PICK B0A05740 ** STEALS TO ITHE PRINTER 80A05740 ** CYCLE STEAL B0A05740 ** CYCLE STEAL B | * SPECIFIED. TRANSFER | 80A06320 |
| *** ROUTINE SIX 80A05-80 ** ROUTINE SIX 80A05-80 ** CYCLE STEAL PICK-UP 80A05-80 ** CYCLE STEAL PICK-UP 80A05-700 ** OFFI 1 4400 0CCC 810 0006 ** THIS ROUTINE CHECKS THAT 80A05710 ** OFFI 1 4400 0CCC 9623 0 0006 ** OFFI 1 44 | * COMPLETE IS NOT EXPECTED AS EXPLAINED IN POUTINE | 80A06330 |
| * ROUTINE SIX 80A05-890 | * AS EXPLAINED IN ROUTINE * FIVE. | 80A06340 80A06350 |
| ** CYCLE STEAL PICK-UP 80A05700 0961 0 0006 ** ** THIS ROUTINE CHECKS THAT 80A05710 0962 1 0667 0962 | * | 80A06360 _ 7 |
| * THIS ROUTINE CHECKS THAT 80A05720 0952 0 0000 ** * THE NUMBER OF CYCLE 80A05720 0954 1 4400 0CCC ** ** THE NUMBER OF CYCLE 80A05730 0954 1 4400 0CCC ** ** DO NOT EXCEED THE MORD 80A05750 0956 0 FFFE 0 0006 0 FFFE 0 0000 0957 1 0571 0950 0950 0950 0950 0950 0950 0950 095 | RTO6 BSI L SEBIT SET UP HEADING | 80A06370 WC = |
| # THIS ROUTINE CHECKS THAT 80A05720 | DC 6 | 80A06380 |
| * THE NUMBER OF CYCLE 80A05730 | DC CSTEL | 80406390 144 |
| * STEALS TO THE PRINTER 80A05740 0964 1 4400 0CCC | DC 6 | 80A06400 /// |
| * OO NOT EXCEED THE WORD 80A05750 09E6 0 FFEE COUNT. CSSS ARE ENDED 80A05750 09E7 1 0E71 9E71 9E71 9E71 9E71 9E71 9E71 9E71 9 | | 80A06410 |
| # COUNT. CSSS ARE ENDED 80A05760 0957 1 0671 0671 | BSI L SEBIT DC -2 | 80A06420 |
| * AND THE 1443 TAKES A 80A05780 | DC -2 DC DROP | 80A06430 |
| * PRINT CYCLE WHEN THE 80A05780 0E9 1 4400 0C78 * 8UFFER ADDRESS REACHES 80A05800 0E9 1 4400 0C78 * 80A05810 09E1 1 4400 0CCC 8 * 80A05810 09E1 1 0C74 8 80A05820 09E0 0 0063 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 | DC 2 | 80A06440 80A06450 |
| * 197. 80A05810 ** | * | 80A06460 |
| * | BSI L HDNG PRINT RTN HEADING | 80A06470 |
| * A MORD COUNT OF 98 WILL 80A05820 09ED 0 0063 | | 80A06480 |
| # JUST MAKE IT. 80A05830 09EE 1 0E74 * * | BSI L SEBIT SET UP DATA | 80A06490 |
| * | DC 99 | 80A06500 |
| * IF THE WORD COUNT REG 80A05850 | DC CSE09 | 80A06510 |
| ## FAILS TO DECREMENT OR AN BOADSBOO | DC 10 | 80406520 |
| # EXTRA WORD IS SENT TO 80A05870 09F1 1 4400 0C50 * THE 1443, THE LINE PRINT 80A05880 09F3 1 4400 0CAC * CYCLE WILL START BEFORE 80A05890 09F5 0 6109 * WC IS ZERO AND WILL BE 80A05900 09F6 1 4400 0D14 * DETECTED BY LOSS OF 80A05910 09F8 0 CA24 * TRANSFER COMPLETE. 80A05920 09F8 0 4810 * TRANSFER COMPLETE. 80A05930 09FA 0 10A0 09FB 0 D224 * TRANSFER COMPLETE. 80A05930 09FA 0 10A0 09FB 0 D224 * O9C1 0 000A | RTO6A LDX 1 2 | 80A06530 80A06540 |
| * CYCLE WILL START BEFORE 80A05890 09F6 0 6109 * CYCLE WILL START BEFORE 80A05900 09F6 0 6109 * CYCLE WILL START BEFORE 80A05900 09F6 1 4400 0D14 * DETECTED BY LOSS OF 80A05910 09F6 0 6224 * TRANSFER COMPLETE. 80A05920 09F9 0 10A00 * SOA05930 09F9 0 10A00 * SOA05930 09F8 0 0224 * OPF0 0 10A0 0PF 0 10A0 * OPF0 0 10A1 * OPF0 0 10A2 * OPF0 0 10A3 * OPF0 0 | BSI L PTRDY PRINTER READY | 80A06550 |
| * WC IS ZERO AND WILL BE 80A05900 09F6 1 4400 0D14 ** DETECTED BY LOSS OF 80A05910 09F8 0 CA24 ** TRANSFER COMPLETE. 80A05920 09F9 0 4810 ** TRANSFER COMPLETE. 80A05930 09FA 0 10A0 ** TRANSFER COMPLETE. 80A05930 09FA 0 10A0 ** OFFA 0 | BSI L PRINT PRINT ONE LINE | 80A06560 |
| * DETECTED BY LOSS OF 80A05910 | LDX 1 9 | 80A06570 |
| # TRANSFER COMPLETE. 80A05920 | BSI L CKXFR CK TRANSFER CMPLT | 80A06580 |
| ************************************** | LDD 2 DSW9-DST | 80A06590 |
| 09BF 1 4400 0CCC RT05 BSI L SEBIT SET UP HEADING 80A05940 09FB 0 0224 09C1 0 000A DC 10 80A05950 09FC 0 1091 09C2 1 0E67 DC CSTEL 80A05960 09FD 0 1801 09C3 0 000A DC 10 80A05970 09FE 0 D225 *********************************** | BSC - SKIP IF ERROR SLT 32 | 80406600 |
| 09C1 0 000A | STO 2 DSW9-DST | 80A06610 80A06620 |
| 09C2 1 0E67 | SLT 17 | 80A06630 |
| 09C3 0 000A | SRA 1 | 80A06640 |
| 09C4 1 4400 0C7B | STO 2 DSW9&1-DST | 80A06650 |
| 09C6 1 4400 0CCC BSI L SEBIT SET UP DATA 80A06000 0A01 0 610A 09C8 0 0061 DC 97 80A06010 0A02 1 4400 0D3A 09C9 1 0E73 DC CSE08 80A06020 0A04 1 4400 0DC2 09CA 0 000A DC 10 80A06030 0A06 1 4400 0D93 *********************************** | SLT 32 | 80A06660 |
| 09C8 0 0061 | STD 2 DSWD-DST | 80A06670 |
| 09C9 1 0E73 | LDX 1 10 | 80A06680 |
| 09CA 0 000A | BSI L CKPTR CK PRINTER COMPLETE BSI L FRRIT PRINT ANY ERRORS | 80406690 |
| * 80A06040 0A08 1 74FF 0820 09CB 0 6102 RT05A LDX 1 2 80A06050 0A0A 0 70E5 09CC 1 4400 0C50 BSI L PTRDY PRINTER READY 80A06060 0A0B 1 4C00 08E0 09CE 1 4400 0CAC BSI L PRINT PRINT ONE LINE 80A06070 ***** 09D0 0 6109 LDX 1 9 80A06080 ** 09D1 1 4400 0D14 BSI L CKXFR CK TRANSFER CMPLT 80A06090 *** | BSI L LOGIT LOG ANY MESSAGES | 80A06700 80A06710 |
| 09CB 0 6102 RT05A LDX 1 2 80A06050 0A0A 0 70E5 09CC 1 4400 0C50 BSI L PTRDY PRINTER READY 80A06060 0A0B 1 4C00 08E0 09CE 1 4400 0CAC BSI L PRINT PRINT ONE LINE 80A06070 ***** 09D0 0 6109 LDX 1 9 80A06080 ** 09D1 1 4400 0D14 BSI L CKXFR CK TRANSFER CMPLT 80A06090 ** | MDX L CYCNT,-1 SKIP IF RTN DONE | 80A06720 |
| 09CE 1 4400 0CAC BSI L PRINT PRINT ONE LINE 80A06070 ***** 09D0 0 6109 LDX 1 9 80A06080 * 09D1 1 4400 0D14 BSI L CKXFR CK TRANSFER CMPLT 80A06090 ** | MDX RT06A | 80A06730 |
| 09D0 0 6109 LDX 1 9 80A06080 * 09D1 1 4400 0D14 BSI L CKXFR CK TRANSFER CMPLT 80A06090 * | BSC L PCON EXIT TO NEXT ROUTINE | 80A06740 |
| 09D1 1 4400 0D14 BSI L CKXFR CK TRANSFER CMPLT 80A06090 * | ********** | 80A06750 |
| · | * | 80A06760 |
| U7U2 U OTUM - LUA - LU - 8UAU61UU - * | * | 80A06770 |
| 09D4 1 4400 0D3A BSI L CKPTR CK PRINTER COMPLETE 80A06110 * | * * | 80A06780 |
| 09D6 1 4400 0DC2 BSI L ERRIT PRINT ANY ERRORS 80A06120 * | * ROUTINE EIGHT | 80A06790 80A06800 |
| 09D8 1 4400 0D93 BSI L LOGIT LOG ANY MESSAGES 80A06130 * | * | 80A06810 |

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OATE 04NOV66 15JUN68 14NOV69 20MAR70 EC NO. 415233 411935 431319 431320

1443 FUNCTION TEST

PROG ID 080A-1

P A GE

1443 FUNCTION TEST

| | * WDRST CASE CDRE A | 80A06820 | OA31 1 4400 OCCC RTO9 BSI L SEBIT SET UP HEADING |
|---------------------------|---|----------------------|---|
| | * | 80A06830 | 0A33 0 000A DC 10 |
| | * THIS ROUTINE TESTS THE | 80A06840 | OA34 1 OEDC DC CHARC |
| | * CORE BUFFER BY PRINTING | 80A06850 | 0A35 0 000A DC 10 |
| | * A NDISY PATTERN. | 80A06860 | * |
| D 1 4400 0555 | ¥ | 80A06870 | 0A36 1 4400 0C7B BSI L HDNG PRINT RTN HEADING |
| D 1 4400 OCCC F 0 0009 | RTO7 BSI L SEBIT SET UP HEADING | 80A06880 | * |
| 0 0009 0 1 0E7E | DC 9 | 80A06890 | OA38 1 4400 OCCC BSI L SEBIT |
| l 0 0009 | DC WCCDR DC 9 | 80A06900 · | 0A3A 0 0090 DC 144 |
| 1 0 0009 | , | 80A06910 | OA3B 1 OE9E DC ALPHA |
| 3 1 4400 0070 | * | 80A06920 | 0A3C 0 0024 DC 36 |
| 2 1 4400 OC7B | BSI L HDNG PRINT RTN HEADING | 80A06930 | OA3D O C2F5 LD 2 SIZE-DST |
| | * | 80A06940 | 0A3E 0 1801 SRA 1 |
| 4 1 4400 OCCC | | 80A06950 | OA3F 1 D400 OF14 STD L BITS |
| 5 0 0090 | BSI L SEBIT SET UP OATA | 80A06960 | 0A41 0 C003 LD SIX8 |
| 7 1 0E88 | DC 144 | 80A06970 | OA42 O D2O2 STD 2 CYCNT-DST |
| 3 0 0008 | DC AWORK | 80A06980 | 0A43 1 4C00 096E BSC L RT03A |
| 5 0 0008 | DC 8 | 80A06990 | * |
| 0 C2F5 | RTO7B LO 2 SIZE-DST | 80407000 | 0A45 0 0048 SIX8 OC 72 CONSTANT |
| 0 1801 | | 80A07010 | ************* |
| 1 0400 OF14 | SRA 1 STO L BITS | 80407020 | * |
| 1 4C00 096E | BSC L RTO3A | 80A07030 | * |
| | DOU L KIUSA | 80A07040 | * |
| | › · · · · · · · · · · · · · · · · · · · | 80A07050 | * |
| | * | 80A07060 | * ROUTINE ELEVEN |
| | * | 80A07070 | * |
| | * RDUTINE NINE | 80407080 | * REGISTRATION |
| | * VOOLING MINE | 80407090 | * |
| | * WDRST CASE CDRE B | 80A07100 | * THIS ROUTINE PRINTS A |
| | * | 80A07110 80A07120 | * FIELD DF I CHARACTERS |
| | * THIS ROUTINE ASSURES | 80A07130 | * SUPERIMPOSEO DN A FIELD |
| | * PRINT RELIABILITY 8Y | 80A07140 | * OF H CHARACTERS WITH A |
| | * PRINTING A SECOND NDISY | 80A07150 | * FLDATING 1. |
| | * PATTERN. | 80A07160 | * |
| | * | 80A07170 | OA46 1 4400 OCCC RTOA BSI L SEBIT SET UP HEADING |
| 1 4400 OCCC | RTO8 BSI L SEBIT SET UP HEADING | 80A07180 | |
| 0 0008 | EIGHT OC 8 | 80A07190 | |
| ? 1 OE7E | DC WCCOR | 80A07200 | 0A49 1 0EE6 DC REGIS 0A4A 0 0006 DC 6 |
| 0 0008 | OC 8 | 80A07210 | * |
| | * | 80A07220 | OA4B 1 4400 OC7B BSI L HDNG PRINT RTN HEADING |
| | * | 80A07230 | * |
| 1 4400 OCCC | BSI L SEBIT | 80A07240 | OA4O O C2F5 LD 2 SIZE-OST |
| O FFFF | DC -1 | 80A07250 | OA4E O DOO2 STO RTOAT |
| 7 1 OE87 | OC WCCB | 80A07260 | OA4F 1 4400 OCCC BSI L SEBIT SET UP DATA |
| 8 0 0001 | OC 1 | 80A07270 | 0A51 0 0090 RTOAL OC 144 |
| | * | 80A07280 | OA52 1 OEEC OC AITCH |
| 9 1 4400 OC7B | BSI L HDNG PRINT RTN HEADING | 80A07290 | 0A53 0 0001 DC 1 |
| | * | 80A07300 | * |
| 3 1 4400 OCCC | BSI L SEBIT SET UP DATA | 80A07310 | OA54 O C2F5 LD 2 SIZE-DST SET LINE COUNTER |
| 0 0090 | OC 144 | 80A07320 | 0A55 0 D202 STO 2 CYCNT-OST |
| 1 0E90 | OC BWORK | 80A07330 | 0A56 1 6700 0F14 LDX L3 BITS |
| 0 0008 | DC 8 | 80A07340 | 0A58 0 1801 SRA 1 |
| | * | 80A07350 | OA59 0 D300 STO 3 0 SET WORD COUNT |
| 0 70E8 | MDX RTO7B | 80A07360 | * |
| | ************* | 80A07370 | 0A5A 0 D004 STO RTOAJ&1 |
| | * | 80A07380 | 0A5B O C3OB LD 3 AITCH-BITS |
| | * | 80A07390 | 0A5C 0 1808 SRA 8 |
| | * | 80A07400 | 0A5D 0 1008 SLA 8 |
| | * | 80A07410 | 0A5E 0 D700 0000 RT0AJ STO L3 0 |
| | * RDUTINE TEN | 80A07420 | 0A60 0 CZEC RTOAA LD 2 TERM-DST. SET SPACE SUPRESS |
| • | * | 80A07430 | 0A61 1 7400 080F MDX L ONLIN,0 IS UNIT ONLINE |
| | * CHARACTER COMPLIMENT | 80A07440 | 0A63 0 7001 MDX *£1 * YES |
| | * | 80A07450 | 0A64 0 D24E STO 2 KEEP-OST |
| | * THIS ROUTINE PRINTS EACH | 80A07460 | 0A65 0 1010 SLA 16 |
| | * CHARACTER IN ALL PRINT | 80A07470 | 0A66 0 92EC S 2 TERM-OST |
| | # DOCKTIONS MED SHAP DAD- | 80A07480 | |
| | * POSITIONS. %52 CHAR BARD | 00001400 | ONOT O CAST OK 2 WKITEGI-D21 |
| | * PUSITIONS: \$52 CHAR BARD | 80A07490 | OA67 O EA3F OR 2 WRITE&1-DST OA68 O O23F STO 2 WRITE&1-OST |

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| TENANCE DIAGNUSTIC PRUGRA | M FOR THE 1800 SYSTEM | PART NO. 2196382 PAGE 7 | I8M MAINTENANCE DIAGNOSTIC P | PRDGRAM FOR THE 1800 SYSTEM | PART NO. |
|--------------------------------------|--|---|------------------------------|---|----------------------------|
| CTION TEST | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 1443 FUNCTION TEST | | PA GE |
| * | | 80A08180 | OAAC 1 4400 0C78 | 8SI L HDNG PRINT RTN HFADING | 00107717 |
| 0A69 0 6102 | LDX 1 2 | 80408190 | | 851 L HDNG PRINT RTN HEADING | 80A08860 |
| 0A6A 1 4400 0C50 | 8SI L PTROY PRINTER READY | 80A08200 | OAAE 1 4400 OCCC | | 80A08870 |
| 0A6C 1 4400 OCAC | 8SI L PRINT PRINT DNE LINE | 80A08210 | 0A80 0 0090 | DC 144 | 80A08880 |
| 0A6E 0 6109 | LDX 1 9 | 80AD8220 . | 0A81 1 0EC2 | | 80A08890 |
| 0A6F 1 4400 0D14 | 8SI L CKXFR CK TRANSFER CMPLT | 80A08230 | 0A82 0 001A | DC STRSS DC 26 | 80408900 |
| 0A71 0 610A | LDX 1 10 | 80A08240 | 0 00 TA | * | 80A08910 |
| 0A72 1 4400 003A | 8SI L CKPTR CK PRINTER COMPLETE | 80A08250 | 0A83 0 C2F5 | · | 80A08920 |
| 0A74 1 C400 080F | LD L ONLIN GET ONLINE SWITCH | 80A08260 | 0AB4 0 1801 | LD 2 SIZE-DST SRA 1 | 80A08930 |
| 0A76 1 4420 ODF3 | 8SI L DROPD.Z RELEASE DEVICE ID &/- | 80A08270 | 0A85 1 D400 OF14 | - · · · · · · · · · · · · · · · · · · · | 80A08940 |
| * | | 80A08280 | 0A87 0 C003 | STO L 8ITS | 80A08950 |
| 0A78 0 6700 0092 | LDX L3 146 | 80A08290 | 0A88 0 D202 | LD FIVE2 STO 2 CYCNT-DST | 80A08960 |
| 0A7A 1 C700 OF14 RTOA | 8 LO L3 8ITS MODIFY FOR OVERPRINT | 80A08300 | 0A 00 0 DE 0E | STO 2 CYCNT-DST | 80 A 0 8 970 |
| 0A7C 0 824F | A 2 ONECH-DST | 80A08310 | 0AB9 1 4C00 096E | · | 80A08980 |
| DA7D 1 D700 0F14 | STO L3 BITS | 80A08320 | 0AD7 1 4C00 076E | BSC L RTO3A | 80408990 |
| 0A7F 0 73FF | MDX 3 -1 | 80A08330 | OAB8 0 0034 | | 80 A 09000 |
| 0A80 0 70F9 | MDX RTOA8 | 80A08340 | UADO U 0034 | FIVE2 DC 52 CDNSTANT | 80409010 |
| * | | 80A08350 | | *********** | 80A09020 |
| 0A81 0 1010 | SLA 16 RESET SPACE SUPRESS | 80A08360 | | * * | 80A09030 |
| 0A82 0 D24E | STO 2 KEEP-DST | 80A08370 | | ** | 80409040 |
| 0A83 0 C23F | LD 2 WRITE&1-DST | | | * - | 80A09050 |
| 0A84 0 1801 | SRA 1 | 80A08380 | | ₹ | 80A09060 |
| 0A85 0 1001 | | 80A08390 | | * RDUTINE THIRTEEN | 80A09070 |
| 0A86 0 D23F | 52 | 80A084D0 | | * | 80A09080 |
| WA86 0 D23F | STO 2 WRITE&1-DST | 80A08410 | | * SPACE IMMEDIATE | 80A09090 |
| · · | LOV 1.2 | 80A08420 | | * | 80A09100 |
| 0487 0 6102 | LOX 1 2. | 80A08430 | | * THIS ROUTINE TESTS THE | 80A09110 |
| 0A88 1 4400 0C50 0A8A 1 4400 0CAC | 8SI L PTRDY PRINTER READY 8SI L PRINT PRINT ONE LINE | 80A08440 | | * CARRIAGE SPACE IMMEDIATE | 80A09120 |
| | | 80A08450 | | * CONTROL FUNCTION. THE | 80A09130 |
| 0A8C 0 6109 | LDX 1 9 | 80A08460 | | * NORMAL SPACE AFTER PRINT | 80A09140 |
| 0A8D 1 4400 0D14 | 8SI L CKXFR CK TRANSFER CMPLT | 80A08470 | | * IS ALSO OBTAINED. | 80A09150 |
| 0A8F 0 610A | LDX 1 10 | 80A08480 | | * | 80A09160 |
| 0A90 1 4400 0D3A | 8SI L CKPTR CK PRINTER CMPLT | 80A08490 | OABC 1 4400 OCCC | RTOC 8SI L SEBIT SET UP RTN HEADING | 80A09170 |
| 0A92 1 4400 0DC2 | 8SI L ERRIT PRINT ANY ERRORS | 80A08500 | 0A8E 0 0008 | DC 8 | |
| 0A94 1 4400 0D93 | BSI L LOGIT LOG ANY MESSAGES | 80408510 | 0ABF 1 0F00 | DC SPIM | 80A09180 |
| 0A96 1 74FF 0820 | MDX L CYCNT,-1 SKIP IF RTN DONE | 80A08520 | 0ACO 0 0008 | DC 8 | 80409190 |
| 0A98 0 7002 | MOX RTOAO | 80A08530 | | * | 80A09200 |
| 0A99 1 4C00 08E0 | 8SC L PCON EXIT TO NEXT ROUTINE | 80408540 | OAC1 1 4400 OC7B | 8SI L HDNG PRINT HEADING | 80A09210 |
| * | | 80A08550 | | * | 80A09220 |
| | 0 LOX L3 146 | 80408560 | OAC3 0 C256 | LD 2 IMSP1-DST SET TO IMMED SPACE | 80A09230 |
| | C LO L3 8ITS | 80408570 | 0AC4 0 D23C | STO 2 CNTRL-DST | 80409240 |
| 0A9F 0 924F | S 2 ONECH-DST | 80A08580 | 0AC5 0 C24A | LD 2 ONE-DST | 80A09250 |
| 0AA0 1 D700 OF14 | STO L3 8ITS | 80408590 | 0AC6 0 D258 | STO 2 STEP-DST | 80A09260 |
| 0AA2 0 73FF | MDX 3 -1 | 80A086 0 0 | | * | 80409270 |
| 0AA3 0 70F9 | MDX RTOAC | 80A08610 | OAC7 1 4400 OCOC | 8SI L SETIT SET UP PRINT DATA | 80A09280 |
| * | | 80A08620 | | * | 80A09290 |
| 0AA4 1 4400 OCB9 | 8SI L ROTA UPDATE OUTPUT FIELD | 80A08630 | 0AC9 0 C216 | LD 2 DSW5&2-DST REPEAT THREE TIMES | 80A09300 |
| OAA6 0 7089 | MOX RTOAA | 80A08640 | 0ACA 0 D202 | STO 2 CYCNT-DST | 80A09310 |
| *** | ********* | 80A0865D | | RTOC3 STO 2 RPCNT-DST | 80A09320 |
| * | | 80A08660 | 0ACC 1 4400 0C2F | | 80A09330 |
| * | | 80A08670 | 0ACE 0 6101 | | 80A09340 |
| * | | 80A08680 | OACF 1 4400 OC50 | LDX 1 1 | 80A09350 |
| * | | 80A08690 | | BSI L PTRDY CK IF PRINTER READY | 80A09360 |
| * | | 80A08700 | 0AD1 0 6104 | | 80A0937D |
| * | ROUTINE TWELVE | 80A08710 | 0AD2 1 44D0 0C95 | LDX 1 4 GIVE CONTROL COMMAND | 80A09380 |
| * | | 80A08720 | | 8SI L FORMS | 8DA09390 |
| * | STRESS | 80A08730 | | | 80A09400 |
| * | JINESS | 80A08740 | 0AD4 0 6105 | LDX 15 PRINT ONE LINE | 80A09410 |
| * | THIS ROUTINE PRINTS THE | 80A08750 | OAD5 1 44DO OCAC | 8SI L PRINT | 8DA09420 |
| * | TYPE BAR IMAGE TO IMPOSE | 80A08760 | | * | 80A09430 |
| * | WORST CASE STRESS ON THE | 80A08770 | 0AD7 0 61D9 | LDX 1 9 CHECK TRANSFER CMPLT | 80A09440 |
| ± | TYPE BAR DRIVE MECHANISM | 80A08780 | 0AD8 1 4400 0D14 | BSI L CKXFR | 80A09450 |
| * | ITTE DAK UKIVE MECHANISM | | | * | 80A09460 |
| ** | | 80A08790 | OADA O 610A | LDX 1 10 CHECK PRINTER CMPLT | 8DA09470 |
| 0447 1 4400 0CCC PTO | TION TO THE TOTAL THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TOT | 80A08800 | OADB 1 4400 OD3A | BSI L CKPTR | 80A09480 |
| 0AA7 1 4400 OCCC RT08 | | 80A08810 | 0ADD 1 4400 0DC2 | BSI L ERRIT PRINT ANY ERRORS | 80A09490 |
| 0AA9 0 0003 | DC 3 | 80A08820 | OADF 1 4400 0D93 | 8SI L LOGIT LOG ANY MESSAGES | 80A09500 |
| OAAA 1 OEEO | DC STRES | 80A08830 | | * | 80A09510 |
| | DC 3 | 80A08840 | DAE1 1 74FF 081F | MDX L RPCNT,-1 SKIP IF DONE | |
| OAAB 0 0003 | | 80A08850 | 0AE3 0 70E8 | HDV F KECKI 1-1 2KIN IE DIINE | 80A09520 |

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| | | | | | | | | • | | | | | | | |
|---------|--------------------------------------|------------------|----------------------------|--------------------------------------|-------------------------------|---------|-----------|----------------------------|------------|----------|------------|----------------------------|---|----------------------|--------|
| IBM MAI | NTENANCE DIAGNOSTIC | PROGRAM FOR | THE 1800 SYSTE | EM | PART ND. | 2196382 | IBM MAIN | TENANCE DIAG | GNOSTIC PE | RDGRAM F | FDR TH | HE 1800 SYS1 | rem | PART ND. | |
| 1443 FI | INCTION TEST | | | | PA GE | В | 1442 5111 | CTION TEST | | | | | | PAGE | 48 |
| 1445 10 | MC110N 1231 | | | • | | | 1445 FUN | CTIDN TEST | | | | | _ | 80410220 | |
| • | 0154 0 6026 | * | | | 80A09540 | |) | DB21 D 8246 | | | A | 2 K010D-DS1 | | 80A10220 80A10230 | |
| | OAE4 D C23C OAE5 O 8246 | LD | 2 CNTRL-DST 2 KD100-DST | ENLARGE THE SKIP | 80A09550 80A0956D | | | DB22 0 D230 | | | | 2 CNTRL-DST - BITS&35•1 | | 80A1D24D | |
| 1 | 0AE6 0 D23C | ŠTO | | | 80A09570 | | | 0B23 1 7401 0B25 1 7401 | | | _ | STEP,1 | • | 80A10250 | |
| | DAE7 1 7401 0F37 | MDX | | | 80A09580 | | | 0625 1 1401 | 1 0010 | * | | 3.2.71 | | 80A10260 | |
| | DAE9 1 7401 0876 | | L STEP,1 | | 80A09590 | | | DB27 0 C216 | 5 | l | LD | 2 DSW5&2-DS | ST | 80A10270 | |
| | | * | | | 80A096D0 | |) | 0B28 0 D201 | | 9 | | 2 RPCNT-DS1 | | 80A102B0 | |
| | DAEB 0 C216 | LO | 2 DSW5&2-0S1 | | 80A09610 | | | DB29 1 74FF | | | | | SKIP IF ODNE | 80A10290 80A10300 | |
| , | OAEC 1 74FF 0820 DAEE 0 70DC | KOM | | SKIP IF DDNE | 80A09620 | | | 0B2B 0 7000 | | | MDX | RTOD4 PCON | | 80A10310 | |
| 4 | OAEF 1 4COO 08E0 | KOM | | | 80A09630 | | , | 0B2C 1 4C00 |) OBEO | | | | ****** | 80A10320 | |
| | UAE: 1 4000 0860 | | C L PCON | ***** | 80A09640 80A09650 | | | | | * | | | | 80A10330 | |
| (| | * | | | 80A09660 | | | | | * | | | • | 80A10340 | |
| | | * | | | 80A09670 | | | | | * | | | | 80A10350 | |
| | | * | | | 80A09680 | | | | | * | | | | 80A10360 80A10370 | |
| | | * | | | 80A09690 | |) | | | * | | 0.01 | ITTALE ETETEEN | 80A10370 | |
| | | * | KUU I | TINE FOURTEEN | 80A09700 80A09710 | | | | | * | | KU | JTINE FIFTEEN | 80A10390 | |
| | | * | | SPACE AFTER PRINTING | 80A09710 80A09720 | | | | | * | | | SKIP IMMEDIATE | 80A10400 | |
| | | * | | · | 80A09730 | | | | | * | | | | 80A10410 | |
| | | * | THIS | S RDUTINE TESTS THE | 80A09740 | | | | | * | | | IS ROUTINE TESTS THE | 80A10420 | |
| | | * | | ACE AFTER PRINT 1443 | 80A09750 | | | | | * | | = : | HANNEL SKIP IMMEDIATE | 80A10430 | |
| | | * | CDN | NTRDL FUNCTION. | 80A09760 | | | | | * | | | ONTROL FUNCTION. THE | 80A10440 80A10450 | |
| | OAF1 1 4400 OCCC | * RTOD BSI | L SEBIT | SET UP RTN HEADING | 80A09770 | | | | | * | | | DRMAL SPACE AFTER PRINT S ALSO RECEIVED. | 80A10460 | |
| | OAF1 1 4400 0000 | 0C | 7 25011 | SET UP KIN HEADING | 80A09780 80A09 79 0 | | | | | * | | 1. | 3 ALSO RECEIVED. | 80A10470 | |
| | 0AF4 1 0F00 | oc oc | SPIM | | 80A09190 80A09800 | | | 0B2E 1 4400 | 0 0000 | RTOE | BS I | L SEBIT | SET UP RTN HEADING | 80A10480 | |
| | OAF5 0 0003 | DC | 3 | | 80A09810 | | | 0B30 0 000 | | | DČ | 7 | | 80A10490 | |
| | | * | | | 80A09820 | | | 0B31 1 DEF | 8 | | DC | SKIM | | 80A10500 | |
| | DAF6 1 4400 OCCC | BSI | | | 80A09830 | | | 0B32 0 000° | 7 | | DC | 7 | | 80A10510 | |
| | OAF8 O FFFA | DC | -6 | | 80A09840 | | | | | * | | 110110 | DO TAIT ING AD TAIC | 80A10520 | |
| | OAF9 1 0EF2 DAFA 0 0006 | OC DC | AFTER | | 80409850 | | | 0B33 1 4400 | 0 0018 | * | BSI L | L HDNG | PRINT HEADING | 80A10530 80A10540 | |
| | | * | 0 | | 80A09860 80A098 7 0 | | | 0835 1 4400 | 0.000 | | BST I | L SETIT | SET UP RTN HEADING | 80A10550 | |
| | OAFB 1 4400 OC78 | BSI | L HDNG | PRINT HEADING | 80A09880 | | | 0000 | 0 0000 | * | | | | - 80A10560 | |
| | | * | | | 80A09890 | | | 0B37 0 6102 | 2 | | LDX | 1 2 | | 80410570 | |
| | OAFD 0 C254 | L0 | | SET TO SPACE AFTER | 80A09900 · | | | 0838 1 6000 | 0 0876 | ; | STX (| L1 STEP | | 80A10580 | |
| | DAFE 0 D23C | STD | - | * PRINTING | 80A09910 | | | | | * | | 0 K0100 D5 | - | 80A10590 | |
| | 0AFF 0 C24A 0B00 0 0258 | L0 STO | 2 DNE-DST 2 STEP-DST | | 80A09920 | | | 0B3A 0 C240 0B3B 0 0230 | | | LD STD | 2 K0100-DS | | 80A10600 80A10610 | |
| | 0800 0 0298 0801 1 4400 0C0C | BSI | | SET UP PRINT DATA | 80A09930 80A09940 | | | 0030 0 0230 | C | * | 310 | Z CNIKL-US | • | 80A10620 | |
| | 0001 1 4400 0000 | * | C SCIII | SET OF FRINT DATA | 80A09950 | | | OB3C 0 6700 | 0 2400 | | LDX I | L3 /2400 | | 80A10630 | |
| | 0B03 0 C216 | LD | 2 DSW5&2-0ST | F REPEAT THREE TIMES | 80A09960 | | | 0B3E 0 610 | | | | 1 6 | | 80A10640 | |
| | 0B04 0 D202 | STO | | | 80A09970 | | | 0B3F 0 4060 | С | 1 | BSI | CHAN | PERFDRM CARRIAGE OP | 80A10650 | |
| | 0805 0 D201 | RTOO3 STO | | | 80A09980 | | | | | * | | | SECET BUTBUT SATA | 80A10660 | |
| | 0B06 1 4400 0C2F 0B08 0 6101 | BSI RTOO4 LDX | | SHIFT FLDATING SLASH | 80409990 | | | 0B40 1 4400 | 0 0000 | ا | R21 I | L SETIT | RESET DUTPUT OATA | 80A10670 80A10680 | |
| | 0809 1 4400 0C50 | | 1 1 L PTRDY | CK IF PRINTER READY | 80A10000 80A10010 | | | 0842 0 610 | 7 | • | LDX | 1 7 | | 80A10690 | |
| | 1307 1 .100 0070 | * | | ON IT THINTEN NEADT | 80A10010 | | | 0B43 1 6D0 | | | | LI BITS&35 | | 80A10700 | |
| | 0B0B 0 610A | LDX | | GIVE CONTROL COMMAND | 80A10030 | | | | | * | | | | 80A10710 | |
| | 0B0C 1 4400 0C95 | BSI | L FORMS | _ | 80A10040 | | | 0B45 0 670 | | | | L3 /2000 | | 80A10720 | |
| | | * | | | 80A10050 | | | 0B47 0 610 | | | | 1 2 | DEDECON CASSAGE SS | 80A10730 | |
| | OBDE 0 6105 | LDX | | PRINT ONE LINE | 80A10060 | | | 0848 0 406 | 3 | * | BSI | CHAN | PERFORM CARRIAGE OP | 80A10740 80A10750 | |
| | OBOF 1 4400 OCAC | * R21 | L PRINT | | 80A10070 80A10080 | | | 0849 0 670 | 0 3000 | | LDX | L3 /3000 | ě | 80A10760 | |
| | OB11 0 6109 | | 1 9 | CHECK TRANSFER CMPLT | B0A10090 | | | 0B4B 0 610 | | | | 1 1 | | 80A10770 | |
| | 0B12 1 4400 0D14 | | L CKXFR | | 80A10100 | | | 0B4C 0 405 | | | BSI | CHAN | PERFORM CARRIAGE OP | 80A10780 | |
| | | * | | | 80A10110 | | | | | * | | | | 80A10790 | |
| | OB14 O 610A | | 1 10 | CHECK PRINTER CMPLT | 80A10120 | | | 0B4D 0 C24 | | | LO | 2 K0100-0S | Τ | 80A10800 | |
| | 0B15 1 4400 0D3A | BSI | | DOINT ANY EDDORE | 80A10130 | | | 084E 1 ECO | | | | L BITS&35. L BITS&35 | , | 80A10810 80A10820 | |
| | 0B17 1 4400 0DC2 0B19 1 4400 0D93 | | L ERRIT L LOGIT | PRINT ANY ERRORS LDG ANY MESSAGES | 80A10140 80A10150 | | | 0B50 1 D40 | 0 0531 | * | 310 | F 0113033 | | 80A10820 | |
| | 3017 1 4400 0073 | * | C 50011 | COU ART MESSAGES | 80A10150 | | | 0B52 0 670 | 0 3000 | | LOX | L3 /3000 | · | 80A10840 | |
| | 0B1B 1 74FF 081F | | L RPCNT,-1 | SKIP IF DONE | 80A10170 | | | 0B54 0 610 | | | | 1 1 | | 80A10B50 | |
| | 0B1D 0 70E8 | MDX | | | 80A10180 | | | 0B55 0 405 | | | BSI | CHAN | PERFORM CARRIAGE OP | 80A10860 | |
| | OB1E 1 4400 OC2F | | L MOVE | | 80A10190 | | | 0B56 0 C24 | | | FD | 2 K0100-DS | Т | 80A10870 | |
| | 0000 0 0000 | * | 0 00000 | ENLANCE THE 6425 | 80410200 | | | 0B57 0 824 | | | A C T D | 2 ONE-DST | | 80A10880 80A10890 | |
| | 0B20 0 C23C | LD | 2 CNIRL-UST | ENLARGE THE SKIP | 80A10210 | | | 0B58 1 D40 | 0 0-31 | | 310 | L BITS&35 | | 00410070 | |
| | | | | | | | | | | | | | | | |
| DATE | 04NDV66 15JUN68 | | 2 0MAR70 | | PROG ID | 080A-1 | DATE | 04NDV66 | 15JUN68 | 14NOV | | 20MAR70 | | PROG ID | 080A-1 |
| EC NO. | 415233 411935 | 431319 | 431320 | | PAGE | 8 | EC NO. | 415233 | 411935 | 43131 | . 9 | 431320 | • | P A GE | 88 |
| | | | | | | | | | | | | | | | |

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| FUNCTION TEST | | PAGE 9 | 1443 FUNCTION TEST | PAGE |
| | * | 80410900 | OB8D O 404E BSI SHAN PERFORM CARRIAGE OP | 80A11580 |
| OB5A O 6700 3000 | LOX L3 /3000 | B0A10910 | * | 80A11590 |
| 0B5C 0 6101 | LOX 1 1 | 80A10920 | OBSE 0 6700 1000 LOX L3 /1000 | 80A11600 |
| 0 B50 0 404E | BSI CHAN PERFORM CARRIAGE OP | 80A10930 | 0B90 0 6101 LDX 1 1 | 80A11610 |
| | * | 80A10940 | OB91 O 404A BSI SHAN PREFORM CARRIAGE OP | 80A11620 |
| 0B5E 0 6700 2800 | LDX L3 /2800 | 80A10950 | * | 80A11630 |
| 0B60 0 6101 | LDX 1 1 | 80A10960 | 0B92 0 C246 LO 2 K0100-DST | B0A11640 |
| 0B61 0 404A | BSI CHAN PERFORM CARRIAGE OP | 80 A 10970 | 0B93 1 EC00 0F37 OR L BITS&35 | 80A11650 |
| 0B62 1 4C00 08E0 | * | 80A10980 | 0B95 1 D400 OF37 STO L BITS&35 | 80A11660 |
| . 0802 1 4000 0860 | BSC L PCON ************************************ | 80A10990 | * | 80A11670 |
| | * | 80A11000 | . 0897 0 6700 1000 LOX L3 /1000 | 80A11680 |
| | * | 80A11010 | OB99 O 6101 LOX 1 1 OB9A O 4041 BSI SHAN PERFORM CARRIAGE OP | 80A11690 |
| | * * | 80A11020 80A11030 | * | 80A11700 |
| | * | 80A11040 | 0B9B 0 C246 LO 2 K0100-DST | 80A11710 80A11720 |
| | * | 80A11050 | 0B9C 0 824A A 2 ONE-OST | 80A11720 |
| | * ROUTINE SIXTEEN · | 80A11060 | OB9D 1 0400 OF37 STO L BITS&35 | 80A11740 |
| | * | 80A11070 | * | 80A11750 |
| | * SKIP AFTER PRINTING | 80411080 | 0B9F 0 6700 0800 LDX L3 /0800 | 80A11760 |
| | * | 80411090 | OBA1 0 6101 LDX 1 1 | 80A11770 |
| | * THIS ROUTINE TESTS THE | 80A11100 | OBA2 O 4039 BSI SHAN EXECUTE CARRIAGE OP | 80A11780 |
| | * CHANNEL SKIP AFTER PRINT | 80A11110 | * OBA3 0 C255 LO 2 WRSK1-DST | 80A11790 |
| | * CONTROL FUNCTION. | 80A11120 80A11130 | OBA3 0 C255 LO 2 WRSK1-DST OBA4 0 023C STO 2 CNTRL-OST | 80A11800 |
| | * | 80A11140 | * * * * * * * * * * * * * * * * * * * | 80A11810 |
| 0B64 1 4400 OCCC | RTOF BSI L SEBIT SET UP RTN HEADING | 80A11150 | OBA5 0 6700 0400 LOX L3 /0400 | 80A11820 |
| 0B66 0 0008 | OC 8 | 80A11160 | 0BA7 0 6101 LOX 1 1 | 80A11830 80A11840 |
| 0B67 1 0EF0 | DC SKAP | 80A11170 | OBAB 1 4400 OBDC BSI L SHAN CHECK CHAN 12 | 80A11850 |
| 0B68 0 0008 | OC 8 | 80A11180 | * | 80A11860 |
| 00/0 0 /101 | * | 80A11190 | OBAA 1 4COO OBEO BSC L PCON | 80A11870 |
| 0B69·0 6101 | LDX 1 1 CK READY | 80411200 | ************** | 80A11880 |
| 0B6A 1 4400 0C50 | BSI L PTRDY * | 80A11210 | * | 80A11890 |
| 0B6C 0 C253 | LO 2 SPAC3-DST | 80A11220 | * | 80A11900 |
| 0B6D 0 023C | STO 2 CNTRL-DST | 80A11230 | * | 80A11910 |
| 0000 0 0230 | * 210 2 CNIKL-D31 | 80A11240 80A11250 | * SKIP IMMEDIATE CHANNEL | 80A11920 |
| 0B6E 0 6104 | LOX 1 4 TRIPLE SPACE | 80A11260 | * CHECK SUBROUTINE | 80A11930 |
| 0B6F 1 4400 0C95 | BSI L FORMS | 80A11270 | OBAC 0 0000 CHAN OC /0000 | 80A11940 |
| | * | 80A11280 | OBAO 1 6D00 081F STX L1 RPCNT SET REPEAT COUNTER | 80A11950 80A11960 |
| 0 87 1 0 C255 | LO 2 WRSK1-DST | 80A11290 | OBAF 1 6F00 083C CHAN1 STX L3 DSW762 | 80A11970 |
| 0B7,2 0 023C | STO 2 CNTRL-DST | 80A11300 | * | 80A11980 |
| 0072 0 (10) | * | 80A11310 | 0BB1 0 6101 LDX 1 1 | 80A11990 |
| 0B73 0 6101 0B74 0 6700 0400 | LDX 1 1 | 80A11320 | OBB2 1 4400 OC50 BSI L PTROY CK PTR READY | 80A12000 |
| 0876 0 4065 | LOX L3 /0400 BSI SHAN PERFORM CARRIAGE OP | 80A11330 | * | 80A12010 |
| 30.0 0 4005 | BSI SHAN PERFORM CARRIAGE OP | 80A11340 80A11350 | 0BB4 0 6104 LDX 1 4 0BB5 1 4400 0C95 BSI L FORMS PERFORM CONTROL | 80A12020 |
| 0B77 1 4400 0C0C | BSI L SETIT SET UP RTN DATA | 80A11360 | OBB5 1 4400 OC95 BSI L FORMS PERFORM CONTROL | 80A12030 |
| | * | 80A11370 | OBB7 0 1010 SLA 16 SET SPACE SUPRESS | 80A12040 |
| OB79 O 6102 | LOX 1 2 | 80A11380 | OBB8 0 92EC S 2 TERM-DST | 80A12050 80A12060 |
| 087A 1 6D00 0876 | STX L1 STEP | 80A11390 | OBB9 O EA3F OR 2 WRITE&1-OST | 80A12030 |
| 0076 0 4555 | * | 80A11400 | OBBA O 023F STO 2 WRITE&1-DST | 80A12080 |
| 0B7C 0 6300 | LOX 3 0 | 80A11410 | OBBB 0 6105 LOX 1 5 PERFORM PRINT | 80A12090 |
| 087D 0 6106 087E 0 405D | LOX 1 6 | 80A11420 | OBBC 1 4400 OCAC BSI L PRINT | 80A12100 |
| VD (C V 4020 | BSI SHAN PERFORM CARRIAGE OP | 80A11430 | OBBE O C23F LO 2 WRITE&1-OST RESET SPACE SUPRESS | 80A12110 |
| 0B7F 1 4400 0C0C | · | 80A11440 | OBBF 0 1801 SRA 1 | 80A12120 |
| 3571 1 4400 0000 | BSI L SETIT * | 80A11450 80A11460 | OBCO 0 1001 SLA 1 OBC1 0 023F STO 2 WRITE&1-DST | 80A12130 |
| 0B81 0 6102 | LOX 1 2 | 80A11450 80A11470 | OBC1 O 023F STO 2 WRITE&1-DST | 80A12140 |
| 0B82 1 6D00 0876 | STX L1 STEP | 80A11480 | | 80A12150 |
| 0B84 0 6107 | LDX 1 7 | 80A11490 | OBC2 0 6109 LOX 1 9 CK XFER CMPLT OBC3 1 4400 0014 BSI L CKXFR | 80A12160 |
| 0B85 1 6D00 0F37 | STX L1 BITS&35 | 80A11500 | * * * * * * * * * * * * * * * * * * * | 80A12170 80A12180 |
| | * | 80A11510 | 0BC5 0 6107 LDX 1 7 | 80A12180 80A12190 |
| 0B87 0 6300 | LOX 3 0 | 80A11520 | OBC6 1 4400 003A BSI L CKPTR CK PTR CMPLT | 80A12190 80A12200 |
| 0B88 0 6101 | LDX 1 1 | 80A11530 | * | 80A12210 |
| 0B89 0 4052 | BSI SHAN PERFORM CARRIAGE OP | 80A11540 | OBCB 1 4400 OOC2 BSI L ERRIT | 80A12220 |
| | * | 80A11550 | OBCA 1 4400 0093 BSI L LOGIT | 80A12230 |
| 0004 0 4700 1000 | LDX L3 /1000 | 80A1156 0 | * | 80A12240 |
| 0B8A 0 6700 1000 0B8C 0 6101 | LOX 1 1 | 80A11570 | OBCC 1 7401 OF37 MDX L BITS&35,1 | 80A12250 |

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1443 FUNCTION TEST

80A12940 80A12950 80A12960 80A12970 80A12980 80A12990 80A13000 80A13010 80A13020 80A13030 80A13040 80A13050 80A13060 80A13070 80A13080 80A13090 80A13100 80A13110 80A13120 80A13130 80A13140 80A13150 80A13160 80A13170 80A13180 80A13190 80A13200 80A13210

80A13220 80A13230

80A13240 80A13250 80A13260 80A13270

80A13280 80A13290 80A13300 80A13310 80A13320 80A13330 80A13340 80A13350 80A13360 80A13370 80A13380 80A13390 80A13400 80A13410 80A13420 80A13430 80A13440 80A13450 80A13460 80A13470 80A13480 80A13490 80A13500 80A13510 80A13520 80A13530 80A13540

80A13550 80A13560 80A13570

80A13580 80A13590 80A13600 80A13610

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| CE 0 C23C . | * | 80A12260 | | ***** | ****** |
|--------------------------------|----------------------------------|----------------------|---------------------------------|-------------------------|--------------------|
| F 0 6236 | LD 2 CNTRL-DST | 80A12270 | | * | |
| 0 0 0230 | A 2 KO100-OST STO 2 CNTRL-DST | 80A12280 | | * | |
| 5 5 5250 | * 2 CNIKL-D\$1 | 80A12290 | | * | |
| 01 0 405D | * BSI MOVE | 80A12300 | | * SETU | JP CARRIAGE TEST |
| 02 0 405C | | 80A12310 | | | OUTPUT ROUTINE . |
| 3 0 405B | 8SI MOVE BSI MOVE | 80A12320 | | * | |
| 4 0 405A | BSI MOVE | 80A12330 | 0000 0 0000 | SETIT OC /0000 | |
| · 0 +05A | * | 80A12340 | 0C0D 1 4400 0CCC | BSI L SEBIT | SET UP PRINT FIELD |
| 5 0 6700 2000 | LDX L3 /2000 | 80A12350 | OCOF 0 001E | DC 30 | |
| 7 1 74FF 081F | MOX L RPCNT,-1 | 80A12360 | OC10 1 OE66 | OC BLANK | |
| 9 0 7005 | MOX CHAN1 | 80A12370 80A12380 | 0C11 0 0001 | DC 1 | |
| | * | 80A12380 80A12390 | | * | |
| A 1 4C80 OBAC | BSC I CHAN | 80A12400 | OC12 O C2E2 | * | |
| | ********* | 80A12410 | 0C12 0 C2E2 0C13 0 82EC | LD 2 RID-DST | |
| | * | 80A12420 | 0C13 0 82EC | A 2 TERM-DST | |
| | * | 80A12430 | 0C14 0 100E 0C15 1 4C10 0C1D | SLA 14 | 00 15 00 10 110 |
| | * | 80A12440 | 0013 1 4010 0010 | BSC L SETT1,- | BR IF SPACING |
| | * SKIP AFTER PRINT CHANNEL | 80A12450 | OC17 1 4400 OCCC | · | |
| | * CHECK SUBROUTINE | 80A12460 | 0C17 1 4400 0CCC 0C19 0 FFFA | 8SI L SEBIT | |
| | * | 80A12470 | 0C19 0 FFFA 0C1A 1 0F08 | DC -6 | |
| C 0 0000 | SHAN OC /0000 | 80A12480 | 0C1A 1 0F08 0C1B 0 0006 | DC CNNL OC 6 | |
| 0 1 6D00 081F | STX L1 RPCNT SET REPEAT COUNTER | 80A12490 | 001B 0 000B | OC 6 | |
| OF 1 6F00 083C | SHAN1 STX L3 DSW762 | 80A12500 | OC1C 0 7005 | MOX SETT2 | |
| | * | 80A12510 | 3010 0 1003 | # HOV SELIC | |
| 1 0 6101 | LDX 1 1 | 80A12520 | 0C1D 1 4400 OCCC | SETT1 BSI L SEBIT | |
| 2 1 4400 0050 | BSI L PTRDY CK PTR READY | 80A12530 | OCIF O FFFA | SETT1 BSI L SEBIT DC -6 | |
| | * | 80A12540 | 0C20 1 0F0E | DC SPCC | |
| 4 0 610A | LDX 1 10 | 80A12550 | 0C21 0 0006 | DC 6 | |
| 5 1 4400 0C95 | 8SI L FORMS PERFORM CONTROL | 80A12560 | | * | |
| 7 - / | * | 80A12570 | 0C22 1 4400 0CCC | SETT2 8SI L SEBIT | |
| 7 0 6105 | LDX 1 5 PERFORM PRINT | 80A12580 | 0C24 0 FFE8 | 0C -24 | |
| 8 1 4400 OCAC | BSI L PRINT | 80A12590 | 0C25 1 0EFF | 0C E | |
| . 4 . 0 . (1.00 | * | 80A12600 | 0026 0 0001 | DC 1 | |
| A 0 6109 | LDX 1 9 CK XFER CMPLT | 80A12610 | | * | |
| B 1 4400 0014 | 8SI L CKXFR | 80A12620 | OC27 O C257 | LD 2 SLASH-OST | SET FLOATING SLASH |
| D 0 (10) | * | 80A12630 | 0C28 1 0400 0F50 | STO L BITS&60 | OLI ILUMITNO SLASH |
| D 0 610A | LOX 1 10 | 80A12640 | | * | |
| E 1 4400 003A | BSI L CKPTR CK PTR CMPLT | 80A12650 | OC2A O C24A | LO 2 ONE-OST | |
| 0 0 6101 | * | 80A12660 | OC2B 1 D400 OF37 | STO L BITS&35 | |
| 0 0 6101 | LDX 1 1 | 80A12670 | | * | |
| 1 1 4400 0C50 | BSI L PTRDY AWAIT CARRIAGE READY | 80A12680 | OC2D 1 4C80 OCOC | BSC I SETIT | RETURN |
| 2 0 04/2 | * | 80A12690 | | ******** | |
| 3 0 0A43 | XIO 2 SENSO-DST | 80A12700 | | * | |
| 4 0 6107 5 1 6600 0055 | LOX 1 7 | 80A12710 | | * | |
| 5 1 4400 005E 7 1 4400 0CFF | 8SI L QLOG SAVE STATUS | 80A12720 | | * | |
| , 1 4400 OCEL | BSI L SBANA CHECK FOR CHANNEL | 80A12730 | 0C2F 0 0000 | MOVE OC /0000 | |
| 0 1 4400 0000 | · | 80A12740 | OC30 O C258 | LD 2 STEP-DST | |
| 9 1 4400 00C2 B 1 4400 0D93 | 8SI L ERRIT | 80A12750 | OC31 O 1003 | SLA 3 | |
| כלטט טטדד ב ט | BSI L LOGIT | 80A12760 | 0C32 0 D001 | STO *&1 | • |
| 0 1 7401 0527 | | 80A12770 | 0C33 0 6700 0000 | LOX L3 /0000 | |
| 0 1 7401 OF37 | MOX L BITS&35,1 | 80A12780 | | * | |
| F 0 C23C | | 80A12790 | 0C35 1 6580 0F14 | LOX II BITS | |
| 0 0 8246 | LO 2 CNTRL-DST | 80A12800 | 0C37 1 C500 0F14 | LO L1 BITS | |
| 1 0 D23C | A 2 K0100~0ST | 80A12810 | OC39 0 18D0 | RTE 16 | |
| 1 0 0230 | STO 2 CNTRL-OST | 80A12820 | OC3A 1 C500 OF13 | LD L1 BITS-1 | |
| 2 0 402C | | 80A12830 | OC3C 0 1380 | SLT 3 0 | |
| 2 0 402C 3 0 402B | | 80A12840 | OC3D 1 4C08 OC47 | 8SC L MOVE4,& | 8R IF BLANK |
| 4 0 402A | BSI MOVE BSI MOVE | 80A12850 | 0C3F 1 D500 0F13 | STO L1 BITS-1 | |
| 5 0. 4029 | BSI MOVE | 80A12860 | 0C41 0 1800 | RTE 16 | |
| - 4. 1027 | * D21 MAE | 80A12870 | 0C42 1 4C08 0C4C | BSC L MOVE5,& | BR IF BLANK |
| 6 0 6300 | LOX 3 0 | 80A12880 | 0C44 1 D500 0F14 | STO L1 BITS | |
| 7 1 74FF 081F | MDX L RPCNT,-1 | 80A12890 | 0046 0 7007 | MDX MOVE6 | |
| 9 0 70D5 | MOX C RPCNI,-I MOX SHANI | 80A12900 | | * | |
| , 0 100) | * MOY 2HANI | 80A12910 | | MOVE4 LD 2 SLASH-DST | |
| | | 80A12920 80A12930 | 0C48 1 D500 OF12 | STO L1 BITS-2 | |
| A 1 4C80 OBOC | BSC I SHAN | | OC4A 1 74FF OF14 | | |

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| NCTION TEST | | PAGE 11 | 1443 FUNCTION TEST | PAGE |
| | * | 80A13620 | OC7F O C253 LD 2 SPAC3-DST SET TO TRIPLE SPACE | 80A14300 |
| OC4C 1 74FF OF14 | MOVE5 MDX L BITS,-1 | 80A13630 | OC80 O D23C STO 2 CNTRL-DST | |
| OC4E 1 4C80 OC2F | MOVE6 BSC I MOVE RETURN | 80A13640 | * | 80A14310 |
| | ************ | 80A13650 | 0C81 0 6104 LDX 1 4 | 80A14320 |
| | * | 80A13660 . | OC82 1 4400 OC95 BSI L FORMS PERFORM SPACING | 80A14330 |
| | * | 80A13670 | * | 80A14340 80A14350 |
| | * | 80A13680 | 0C84 0 6105 LDX 1 5 | 80A14360 |
| | * PRINTER READY ROUTINE | 80A13690 | OC85 1 4400 OCAC BSI L PRINT PRINT HEADING | 80A14370 |
| | * | 80A13700 | 0C87 0 6109 LDX 1 9 | 80A14370 80A14380 |
| | * THIS ROUTINE WAITS FOR | 80A13710 | OC88 1 4400 OD14 | 80A14390 |
| | * THE DSW TO APPEAR AS | 80A13720 | 0C8A 0 610A LDX 1 10 | 80A14400 |
| | * SPECIFIED 8Y XR1. IF | 80A13730 | OC8B 1 4400 0D3A 8SI L CKPTR BR TO CK PRNTR | 80A14410 |
| | * IT NEVER APPEARS PROPER | 80A13740 | OC8D 1 4400 ODF3 BSI L DROPD BR TO RELEASE DEVICE | |
| | * THEN ERRORS WILL BE | 80A13750 | * | 80A14430 |
| | * PRINTED. | 80A13760 | OC8F 1 6700 OD74 LDX L3 MSGAR&2 RESET LOG AREA | 80A14440 |
| | * | 80A13770 | 0C91 1 6F00 0D61 | 80A14450 |
| | * CALL ************ | 80A13780 | OC93 1 4C8O OC78 BSC I HDNG RETURN | 80414460 |
| | * | 80A13790 | ************* | 80A14470 |
| | * * BSI L PTRDY * | 80A13800 | * | 80A14480 |
| | * ********** | 80A13810 | * | 80414490 |
| 0050 0 0000 | PTRDY DC /0000 | 80A13820 | * | 80A14500 |
| 0C51 0 691F | STX 1 PTRY4&1 | 80A13830 | * CARRIAGE CONTROL ROUTINE | 80A14510 |
| 0C52 0 C01E | LD PTRY4&1 | 80A13840 | * | 80A14520 |
| 0C53 0 1002 | SLA 2 | 80A13850 80A13860 | * THIS ROUTINE PERFORMS | 80A14530 |
| 0C54 0 D00A | STO PTRY3&1 | 80A13860 80A13870 | * CARRIAGE CONTROL AND | 80A14540 |
| 0C55 0 C245 | PTRY1 LD 2 KO400-DST | 80A13880 | * CHECKS THE DSW AFTER | 80A14550 |
| 0C56 0 D2O3 | STO 2 WACNT-DST | 80A13890 | * THE XIO CUNTROL COMMAND. | 80A14560 |
| OC57 1 4400 OE06 | 8SI L GETDE GO REQUEST DEVICE | 80A13900 | | 80A14570 |
| OC59 O OA41 | XIO 2 SENSO-DST SENSE DSW - NO RESET | 80A13910 | * CALL **************** | 00/12/12/00 |
| OC5A 1 4400 OD5E | BSI L QLOG SAVE STATUS | 80A13920 | * | |
| 0C5C 1 6600 081E | PTRY2 LDX L2 DST | 80A13930 | * ************** | OURITOUU |
| OC5E 0 6500 0000 | PTRY3 LDX L1 /0000 | 80A13940 | * | 30411010 |
| OC60 O OA41 | XIO 2 SENSO-DST SENSE DSW - NO RESET | 80A13950 | 0C95 0 0000 FORMS DC /0000 | 80A14620 80A14630 |
| 0C61 1 4400 0CFF | 8SI L SBANA | 80A13960 | 0C96 0 C246 LD 2 K0100-DST RESTORE PRINT WORDS | 80A14640 |
| 0C63 0 E901 | OR 1 1 | 80A13970 | 0C97 0 D242 STO 2 PRDSW-DST | 80A14650 |
| 0C64 1 4C18 0C70 | BSC L PTRY4,&- BR IF PRINTER READY | 80A13980 | 0C98 0 D240 STO 2 XFDSW-DST | 80A14660 |
| 0C66 1 74FF 0821 | * | 80A13990 | * | 80A14670 |
| 0C68 0 700E | MDX L WACNT,-1 | 80414000 | OC99 O OA3C XIO 2 CNTRL-DST CONTROL 1443 | 80A14680 |
| 0069 0 1010 | MDX PTRY9 | 80A14010 | OC9A O OA41 XIO 2 SENSO-DST SENSE - NO RESET | 80A14690 |
| 0C6A 0 D24E | SLA 16 STO 2 KEEP-DST | 80A14020 | 0C98 0 1000 NOP 0 | 80414700 |
| 0C68 1 4400 0DC2 | | 80A14030 | * | 80414710 |
| 0C6D 1 4400 0D93 | | 80A14040 | OC9C 1 4400 OD5E 8SI L QLOG SAVE STATUS | 80A14720 |
| 0C6F 0 70E5 | BSI L LOGIT LOG ANY MESSAGES MDX PTRY1 | 80A14050 | OC9E 1 4400 OCFF 8SI L SBANA CHECK FOR BUSY | 80A14730 |
| · · · | * | 80A14060 80A14070 | 0CAO 0 610A LDX 1 10 | 80414740 |
| | * | 80A14070 80A14080 | OCA1 1 4400 OD3A BSI L CKPTR GO CK PRNTR | B0A14750 |
| 0C70 0 6500 0000 | PTRY4 LDX L1 /0000 | 80A14080 80A14090 | OCAS 1 4400 ODC2 BSI L ERRIT BR TO ERROR RTN . | 80A14760 |
| OC72 1 4400 OD5E | 8SI L QLOG SAVE STATUS | 80A14100 | 0CA5 1 4400 0D93 | 80A14770 |
| 0C74 0 6105 | LDX 1 5 | 80A14110 | 0010 1 1/00 0055 | 80A14780 |
| 0C75 1 4C80 0C50 | BSC I PTRDY EXIT TO USER | 80A14110 | OCAA 1 4400 OC50 BSI L PTRDY BR TP CK FOR RDY OCAA 1 4C80 OC95 BSC I FORMS EXIT | 80A14790 |
| | * | 80A14130 | *********************************** | 80A14800 |
| 0.077 | * | 80A14140 | * | |
| 0C77 1 6600 0C5C | PTRY9 LDX L2 PTRY2 | 80A14150 | * | 80A14820 80A14830 |
| 0C79 1 4C00 ODBE | BSC L LOPGO | 80A14160 | * | 80A14B40 |
| | ********** | 80 A 14170 | * PRINT ROUTINE | 80A14B50 |
| | * | 80A14180 | * * * * * * * * * * * * * * * * * * * | 80A14B50 80A14860 |
| * | # | 80A14190 | * THIS ROUTINE PRINTS DATA | 80A14880 |
| | * * * * * * * * * * * * * * * * * * * | 80A14200 | * AND CHECKS THE DSW AFTER | |
| | * PRINT HEADING ROUTINE | 80A14210 | * XIO INITIALIZE WRITE | 80A14890 |
| | * * | 80A14220 | * COMMAND. | 80A14900 |
| | # # # # # # # # # # # # # # # # # # # | 80A14230 | * | 80A14910 |
| | * SAVE STATUS ROUTINE | 80A14240 | * CALL ************ | |
| 0078 0 0000 | HDNC DC (0000 | 80A14250 | * | |
| 0C7B 0 0000 0C7C 0 6101 | HDNG DC /0000 | 80A14260 | * * BSIL PRINT * | |
| 0C7D 1 4400 0C50 | LDX 1 1 BSI L PTRDY CK IF PTR READY | 80A14270 | * ********* | |
| 0010 1 4400 0090 | BSI L PTRDY CK IF PTR READY | 80A14280 | * | 80A14960 |
| | Tr. | 80A14290 | OCAC 0 0000 PRINT DC /0000 | 80A14970 |

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| AINTENANCE OLAGNOSTIC | PROGRAM FOR THE 1800 SYSTEM | PART NO. 2196382 | IBM MAINTENANCE DIAGNOSTIC | PROGRAM FOR THE 1800 SYSTEM | PART NO. PAGE |
|--------------------------------------|---|------------------------------|--------------------------------------|--|-------------------------------|
| FUNCTION TEST | • | PAGE 12 | 1443 FUNCTION TEST | | PAGE |
| OCAD 0 C246 | LD 2 KO100-DST RESTORE INTRPT WORDS | 80A14980 | (F) OCD4 0 C300 | LD 3 0 FETCH WORD COUNT | 80A15660 |
| OCAE 0 0242 OCAF 0 D240 | STO 2 PRDSW-DST STO 2 XFOSW-DST | 80A14990 80A15000 | 0C05 1 4C30 0CFA | BSC L RSTWC,-Z BR IF RESTORE FIELD | 80A15670 80A15680 |
| _ | * | 80A15010 | OCD7 1 C400 OF14 | LD L BITS ADD TO EXISTNG FIELD | 80A15690 |
| OCBO O OA3E OCB1 O OA41 | XIO 2 WRITE-DST PRINT LINE XIO 2 SENSO-DST SENSE - NO RESET | 80A15020 80A15030 | 0C09 0 8012 0CDA 0 0011 | A PUT&1 STO PUT&1 | 80A15700 80A1571 0 |
| OCB2 0 1000 OCB3 1 4400 OD5E | NOP 0 | 80A15040 |) | * | 80A15720 80A15730 |
| OCB5 1 4400 OCFF | BSI L QLOG SAVE STATUS BSI L SBANA CHECK FOR BUSY | 80A15050 80A15060 | 0CDB 0 C300 0CDC 0 9300 | LD 3 0 MAKE WORD COUNT S 3 0 * POSITIVE | 80A15740 |
| OCB7 1 4C80 OCAC | BSC I PRINT EXIT ************************************ | 80A15070 80A15080 | OCOD 0 9300 OCDE 0 DO01 | S 3 0 STOLX STO LXR2&1 | 80A15750 80A15760 |
| | * | 80A15090 | r. | * | 80A15770 |
| • | * | 80A15100 80A15110 | OCDF 0 6600 0000 OCE1 0 C301 | LXR2 LDX L2 O LOAD XR2 WITH WD CNT LD 3 1 FETCH SOURCE DATA AO | 80A15780 80A15790 |
| | * SHIFT OUTPUT ROUTINE * THE ROTATE ROUTINE SHIFTS | 80A15120 | OCE2 1 8400 080A OCE4 0 D005 | A L TERM Sto Get&1 | 80A158 0 0 80A15810 |
| | * * ALL CHARACTERS IN OUTPUT | 80A1513 0 80A15140 | 0024 0 0003 | * | 80A15820 |
| | * * AREA ONE PLACE. | 80A15150 80A15160 | 0CE5 0 C302 0CE6 0 0001 | LXR1 LO 3 2 FETCH SOURCE SIZE STO *&1 | 80A15830 80A15840 |
| 0000 0 0000 | * | 80A15170 | OCE7 0 6500 0000 | LDX L1 0 | 80A15850 |
| OCB9 0 0000 OCBA 0 6A0E | ROTA DC /0000 STX 2 ROTA2&1 SAVE XR2 | 80A15180 80A15190 | 0CE9 0 C500 0000 0CEB 0 D600 0000 | GET LD L1 O XFER SOURCE DATA PUT STO L2 O * TO PRINT AREA | BOA15860 80A15870 |
| OCBB 0 6600 0090 | LDX L2 144 SET TO END OF TABLE | 80A15200 | OCED 1 7401 0F14 | MDX L BITS,1 INCR PRINT FIELD WC | 80A15880 |
| OCBD 1 C400 OF15 OCBF 0 18D0 | LD L BITS&1 PLACE 1ST CHAR LAST RTE 16 | 80A15210 80A15220 | 0CEF 0 72FF | * MDX 2 -1 | 80A15890 80A15900 |
| OCCO 1 C600 OF14 OCC2 0 18D8 | ROTAL LO L2 BITS PICK UP NEXT WORD RTE 24 | 80A15230 | 0 CF0 0 7 006 | MDX OECXO RET TO XFER NXT DATA | 80A15910 |
| OCC3 1 D600 OF14 | STO L2 BITS SAVE ADVANCED CHARS | 80A15240 80A15250 | 0CF1 0 6500 0000 | SEBOT LDX L1 O FINISHED WITH XFER | 80A15920 80A15930 |
| 0CC5 0 I088 0CC6 0 72FF | SLT 8 MDX 2 -1 CHECK IF TABLE CMPLT | 80A15260 80A15270 | 0CF3 0 6600 0000 0CF5 0 4F00 0003 | LDX L2 O * RESTORE XRS BSC L3 3 RETURN | 80A15940 80A15950 |
| OCC7 0 70F8 | MDX ROTA1 | 80A15280 | | * | 80A15960 |
| OCC8 0 6600 0000 OCCA 1 4C80 OCB9 | ROTA2 LDX L2 /0000 RESTORE XR2 BSC I ROTA | 80A15290 80A15300 | 0CF7 0 71FF 0CF8 0 70F0 | DECXO MDX 1 -1 MDX GET GO XFER NEXT DATA | 80A15970 80A15980 |
| . • | *********** | 80A15310 | OCF9 0 70EB | MOX LXR1 FULL - WRAP DATA | 80A15990 |
| | * | 80A15320 80A15330 | | * * AROUND IN PRINT AR * | 80A16000 80A16010 |
| | * * SET PRINTER OUTPUT ROUTINE | 80A15340 · 80A15350 | OCFA 0 1010 OCFB 1 D400 OF14 | RSTWC SLA 16 RESET PRINT FIELO WC | 80A16020 80A16030 |
| | * | 80A15360 | OCFD 0 C300 | LO 3 0 | 80A16040 |
| | * THIS ROUTINE SETS DATA IN * THE 1443 OUTPUT AREA. | 80A15370 80A15380 | OCFE 0 700F | MOX | 80A16050 80A16060 |
| | * THE WORD COUNT IS PLACED * EQUAL TO THE TOTAL DATA | 80A15390 | | * | 80A16070 |
| | * SIZE. | 80A15400 80A15410 | | * | 80A16080 80A16090 |
| • | * CALL *********** | 80A15420 80A15430 | | * STATUS ANALYSIS ROUTINE | 80A16100 80A16110 |
| | * * BSI L SEBIT * | 80A15440 | | * THIS ROUTINE CHECKS THE | 80A16120 |
| | * | 80A15450 80A15460 | | * OSW FOR THE PROPER BITS * AND SAVES ANY ERRORS IN | 80A16130 80A16140 |
| | * | 80A15470 | | * THE FORM OF OSW WAS AND | 80A16150 |
| | * | 80A15480 80A15490 | | * DSW SHOULD HAVE BEEN. | 80A16160 80A16170 |
| | * TO AOO TO EXISTING OATA * THE DATA SIZE SHOULO BE | 80A15500 80A15510 | | * CALL ****************** * LOX 1 4XMSG IO NO * | 80A16180 80A16190 |
| | * SPECIFIED NEGATIVELY. | 80A15520 | | * * BSIL SBANA * | 80A16200 |
| | * * XR1 AND XR2 ARE SAVED | 80A15530 80A15540 | | * ************** | 80A16210 80A16220 |
| 0000 0 0000 | * | 80A15550 | i | * THE MSG IO NO REFERS TO A | 80A16230 |
| 0000 0 0000 | SEBIT OC 0 | 80A15560 80A15570 | | * STRING. THIS STRING IS * CALLED DSWN FOR MSG IO | 80A16240 80A16250 |
| OCCO O 6924 OCCE O 6A25 | STX 1 SEBOT&1 SAVE INDEX REGS STX 2 SEBOT&3 | 80A15580 | | * NUMBER N. THE STRING IS. | 80A16260 |
| | * | 80A15590 80A15600 | | * DSWN DC OSW WAS | 80A16270 80A16280 |
| OCCF 1 6780 OCCC | LOX I3 SEBIT FETCH CALLING ADDR | 80A15610 80A15620 | | * DC OSW S/B * DC EXPECTED OSW | 80A16290 80A16300 |
| 0C01 1 6600 0F14 | LDX L2 BITS INITIALIZE RTN | 80A15630 | | * OC MASK FOR CKG | 80A16310 |
| OCD3 0 6A18 | STX 2 PUT&1 | 80A15640 80A15650 | OCFF 0 0000 | * SBANA OC /0000 | 80A16320 80A16330 |
| | | 00412020 | 0011 0 0000 | (D.M. 00 / 0000 | 00010000 |

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| MAINTENANCE DIAGNOSTIC | PROGRAM FOR THE 1800 SYSTEM | PART ND. 2196382 | IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM | PART NO. 2196 |
|---------------------------------|--------------------------------------|----------------------|--|----------------------|
| FUNCTION TEST | | PAGE 13 | 1443 FUNCTION TEST | PAGE |
| 0D00 1 7500 081E | MOX L1 DST FETCH ANALYSIS MSG | 80A16340 | | |
| 0D02 0 1000 | NOP 0 | 80A16350 | * | 80A17020 |
| 0D03 0 0248 | STO 2 SBANQ-DST | 80A16360 | 0030 0 6901 STX 1 *61 | 80A17030 |
| 0D04 0 1800 | RTE 16 | 80A16370 | 003E 0 6500 0000 CKPT1 LOX L1 /0000 | 80A1704 0 |
| 0D05 0 C248 | LO 2 SBANQ-OST | 80A16380 | 0040 1 6600 081E LOX L2 OST 0042 0 C242 LO 2 PROSW-DST | 80A17050 |
| 0D06 0 F102 | EOR 1 2 CK AGAINST EXPECTED | 80A16390 | | 80A17060 |
| 0007 O E103 | AND 1 3 REMOVE UNNEC 8ITS | 80A16400 | 00// 1 /610 00/0 | 80A17070 |
| ODO8 O D100 | STO 1 0 | 80A16410 | BSC L CKPT7,&- 8R IF PTR NOT CMPLT | 80A17080 |
| 0D09 0 D101 | STO 1 1 | 80A16420 | 0046 0 C242 LO 2 PRDSW-DST . | 80A17090 |
| . 0D0A 1 4C98 OCFF | BSC I S8ANA,&- EXIT IF OSW OK | 80A16430 | 0D47 0 4016 8SI QLDG SAVE STATUS | 80A17100 |
| ODOC 0 C103 | LD 1 3 SET DSW S/B | 80A16440 | OD48 0 4086 BSI SBANA CHECK FOR ERROR | 80A17110 |
| 0D00 0 F2EC | EOR 2 TERM-DST | 80A16450 | * * CHECK FOR ERROR | 80A17120 |
| 0D0E 0 E248 | ANO 2 SBANQ-OST | 80A16460 | 0049 1 4C80 003A CKPT3 BSC I CKPTR RETURN | 80A17130 |
| 0D0F 0 E902 | OR 1 2 | 80A16470 | * | 80A17140 |
| 0D10 0 18D0 | RTE 16 | 80A16480 | * | 80A17150 |
| 0 D11 0 0900 | STD 1 0 SAVE ANY ERROR FDUNO | 80A16490 | 004B 1 74FF 0821 CKPT7 MOX L WACNT,-1 | 80A17160 |
| 0013 1 4600 0655 | * | 80A16500 | 0D40 0 7000 MOX CKPT8 | 80A17170 |
| 0012 1 4C80 OCFF | BSC I SBANA EXIT | 80A16510 | 004F O COFO LO CKPT1&1 | 80A17180 80A17190 |
| | ********** | 80A16520 | 004F 0 1002 SLA 2 | 80A17190 80A17200 |
| | ↑ | 80A16530 | 0D50 0 0001 STO *ε1 | 80A17210 |
| | ± ± | 80A16540 | 0D51 0 6500 0000 | 80A17210 |
| | * CHECK TRANSFER COMPLETE | 80A16550 | 0053 0 0A43 XIO 2 SENSD-DST | 80A17230 |
| | * RDUTINE | 80A16560 | 0054 0 EA46 OR 2 K0100-DST | 80A17240 |
| | * | 80A16570 80A16580 | OD55 O 40A9 BSI SBANA SAVF ERRDR MESSAGE | 80A17250 |
| 0014 0 0000 | CKXFR OC /0000 | 80A16590 | EUR 2 K0100-0ST | 80A17260 |
| 0D15 0 C246 | LD 2 KO100-DST RESET WAIT COUNTER | 80A16600 | 0D57 0 DA38 | 80A17270 |
| 0D16 0 1802 | SRA 2 | 80A16610 | 0058 0 10A0 SLT 32 0059 0 D900 STD 1 0 | 80A17280 |
| OD17 0 0203 | STD 2 WACNT-DST | 80A16620 | 0054 0 7055 | 80A17290 |
| | * | 80A16630 | OD5A O 70EE MOX CKPT3 | 80A17300 |
| OD18 0 6901 | STX 1 *&1 | 80A16640 | 0050 1 4400 0025 | 80A17310 |
| 0019 0 6500 0000 | CKXF1 LOX L1 /0000 | 80A16650 | 0058 1 6600 003E CKPT8 LDX L2 CKPT1 TRY AGAIN - LATER 005D 0 7060 MDX LOPGO | 80A17320 |
| 001B 1 6600 081E | LOX L2 DST | 80A16660 | | 80A17330 |
| 001D 0 C240 | LD 2 XFDSW-DST | 80A16670 | **************** | 80A17340 |
| OD1E O F246 | FOR 2 K0100-0ST | 80A16680 | | 80A1735 0 |
| OD1F 1 4C18 OD26 | BSC L CKXF7,&- BR IF XFER NOT CMPLT | 80A16690 | * | 80A17360 |
| | * | 80A16700 | * 705 000 00 000 000 | 80A17370 |
| 0 D21 0 C240 | LO 2 XFDSW-DST | 80A16710 | * THE QULDG RDUTINE SAVES | 80A17380 |
| 0022 0 4038 | BSI QLOG SAVE STATUS | 80A16720 | * LOG MESSAGES IN DROER | 80A17390 |
| 0D23 0 40D8 | 8SI S8ANA CHECK FOR ERRDR | 80A16730 | * RFCFIVFD FOR OUTPUT AT * A LATER TIME. | 80A17400 |
| | * | 80A16740 | * * CATEN TIME. | 80A17410 |
| 0D24 1 4C80 0D14 | CKXF3 8SC I CKXFR RETURN | 80A16750 | * CALL ************ | 80A17420 |
| | * | 80A16760 | * * LOX 1 MSG IO ND * | 80A17430 |
| 0D24 1 74EE 0021 | CUVEZ MOV I MACNIT 1 | 80A16770 | * * BSI L QLOG * | 80A17440 |
| 0D26 1 74FF 0821 0D28 0 700D | CKXF7 MOX L WACNT,-1 | 80A16780 | * ************** | 80A17450 80A17460 |
| 0D28 0 700D 0D29 0 C0F0 | MOX CKXF8 LD CKXF1&1 | 80A16790 | * AT FNTRY TIME | 80A17480 80A17470 |
| 0D24 0 1002 | SLA 2 | 80A16800 80A16810 | * ACC EQUALS MSG WANTED | 80A17480 |
| OD28 O D001 | STO *&1 | 80A16820 | * XR1 EQUALS MSG ID NO | 80A17490 |
| 0D2C 0 6500 0000 | LDX L1 /0000 | 80A16830 | * | 80A17500 |
| 002E 0 0A43 | XID 2 SFNSD-DST | 80A16840 | * | 80A17510 |
| 0D2F 0 EA46 | OR 2 K0100-0ST | 80A16850 | * ACC IS SAVED | 80A17520 |
| 0030 0 40CE | BSI S8ANA SAVE ERRDR MESSAGE | 80A16860 | * XR1 IS MULTIPLIED BY FDUR | 80A17530 |
| 0D31 0 F246 | EDR 2 K0100-0ST | 80A16870 | 주 * | 80A17540 |
| OD32 O DA34 | STD 2 DSWO-OST | 80A16880 | OD5E 0 0000 QLOG DC /0000 | 80A17550 |
| 0D33 0 10A0 | SLT 32 | 80A16890 | 005E 0 0000 QLOG DC /0000 005F 0 690F STX 1 QLDG2&1 | 80A17560 |
| 0034 0 0900 | STD 1 0 | 80A16900 | 0060 1 6500 0074 QLOG1 LOX L1 MSGAR&2 . | 80A17570 |
| 0035 0 70EF | MDX CKXF3 | 80A16910 | 0062 1 7402 0D61 MOX L QLDG1&1,2 UPOATF STD AREA | 80A17580 |
| 002/ 1/25 | * | 8 0 A16920 - | * * CONTRACTOR OF STUBBLE STUB | 80A17590 |
| 0036 1 6600 0019 | CKXF8 LDX L2 CKXF1 TRY AGAIN - LATER | 80A16930 | 0064 0 0101 | 80A17600 |
| 0038 1 4C00 0D8E | 8SC L LOPGO | 80A16940 | * SAVE MESSAGE | 80A17610 |
| | *********** | 80A16950 | 00/5 0 5000 | 80A17620 |
| | * | 80A16960 | 0D65 0 C009 LD QLDG2&1 SFT MESSAGE IO 0D66 0 E828 OR KAOOO | 80A17630 |
| | * | 80A16970 | 0D67 0 D100 STO 1 0 | 80A17640 |
| 0034 0 0000 | # CVDTD DC 40000 | 80A16980 | 0068 0 1810 SRA 16 CLEAR NEXT MSGID | 80A17650 |
| 0D3A 0 0000 | CKPTR DC /0000 | 80A16990 | 0D69 0 0102 STO 1 2 | 80A17660 |
| 003B 0 C245 0D3C 0 D203 | LO 2 KO400-OST RESFT WAIT CDUNTER | 80A17000 | * | 80A17670 |
| DUAL D 0704 | STD 2 WACNT-DST | 80417010 | OD6A O COO4 LD QLDG2&1 SFT XR1 | 80A17680 |

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| 0068 0 1002 | SLA 2 | | 80A17700 | OD8C 1 6600 ODE3 | ERR8Y LDX | L2 ERR5 | TRY AGAIN - LATER |
|-------------------------------|-----------------------------|---|----------------------|--------------------------------------|------------|----------------------|--------------------------|
| DD6C 0 D002 | STO QLOG281 | | 80A17710 | OD8E 1 6E00 0809 | LOPGO STX | | |
| 0D6D 0 C101 | LD 1 1 | RESTORE ACC | 80A17720 | 00C0 0 4C80 012D | 8SC | I START | |
| DD6E 0 6500 0000 | QLDG2 LDX L1 /0000 | | 80A17730 | | ****** | **** | ****** |
| DD70 1 4C80 OD5E | * 8SC I QLDG | EXIT TD USER | 80A17740 80A17750 | | * | | |
| DD10 1 4000 003E | * | EXII ID OSEK | 80A17750 80A17760 | | * | | • |
| DD72 0000 | BSS E O | | 80A17770 | | * | LD | G ERROR RDUTINE |
| D72 0 0001 | MSGAR DC 1 | MDDIFIER WORD CDUNT | 80A17780 | | * | CU | G ERROR ROUTINE |
| D73 0 0000 | DC 0 | HEX OUTPUT | 80A17790 | | * | TH | E ERROR ROUTINE LOGS |
| DD74 0 0000 | DC 0 | MESSAGE ID | 80A17800 | | * | * A | LL ERRDR MESSAGES |
| DD75 0 0000 | DC 0 | D8JECT DSW | 80A17810 | | * | | |
| DD76 001C | 8SS 28 | 65.465.44.5 | 80A17820 | | * | | |
| DD92 0 A000 | KA000 DC /A000 | CDNSTANT | 80A17830 | 0DC2 0 0000 | ERRIT OC | /0000 | 251 5465 7115 2442 |
| | * | * | 80A17840 80A17850 | 0DC3 0 402F 0DC4 1 C480 0E10 | 85 I LD | OROPO I GETAD | RELEASE THE 1443 |
| | * | | 80A17860 | 0DC4 1 C480 0E10 | BSC | I ERRIT, & | 8R IF NOT RELEASED |
| | * LDG ! | MESSAGE RDUTINE | 80A17870 | 0000 1 4000 0DC2 | * | I LUKII 9 G | OK IT NOT KELEASED |
| | * | | 80A17880 | ODC8 0 6500 FFC8 | ERR1 LDX | L1 -56 | CHECK ERRDR TABLE |
| | | LDGGING RDUTINE SETS | 80A17890 | ODCA O 10AO | SLT | 32 | |
| | | ND LDGS MESSAGES | 80A17900 | ODCB 1 B000 085A | ERR2 DCM | L1 DSTE60 | |
| | | IOUSLY SAVED BY THE | 80A17910 | ODCD 0 1000 | NOP | 0 | |
| | ₩ QLDG | RDUTINE. | 80A17920 | ODCE 0 7008 | MDX | ERR4 | 8R IF ENTRY FOUND |
| D93 0 0000 | * LDGIT DC /0000 | | 80A17930 | 0DCF 0 7104 | MOX | 1 4 | |
| D94 1 6700 0D74 | LDX L3 MSGAR&2 | RESET QULOG AREA | 80A17940 80A17950 | 0DD0 0 70FA | MDX | ERR 2 | |
| DD94 1 6700 0D74 | STX 3 QLOG181 | NESEL WOLUG AREA | 80A17950 80A17960 | ODD1 0 C2E5 | * LD | 2 SW1-OST | |
| | * | | 80A17970 | ODD1 0 0225 | EDR | 2 SWCMP-OS | Т |
| D97 0 C2E2 | LD 2 RID-DST | CHECK IF FORCE LDG | 80A17980 | ODD3 1 4C20 08E0 | BSC | L PCDN,Z | 8R IF SW1 CHANGEO |
| D98 0 8250 | CMP 2 KOOOC-DST | | 80A17990 | 0DD5 1 4C80 0DC2 | 8SC | I ERRIT | RETURN TO USER |
| D99 0 7 019 | MDX QLUP1 | NDT IN THIS ROUTINE | 80A18000 | | * | | |
| D9A 0 1000 | NDP | | 80A18010 | ODD7 1 CD00 085A | | L1 DST&60 | TRANSFER TO DUTPUT |
| DD98 0 C2E4 | LD 2 SWO-DST | | 80A18020 | 0D09 0 D816 | STD | EMESS&3 | |
| D9C 0 1009 | SLA 9 | OR 15 NRT 1 00 NOV | 80A18030 | 0004 0 4017 | Α | 1 545555 | 01111 0 450 10 |
| DD9D 1 4C10 0D83 | 8SC L QLUP1,- | 8R IF NDT LOG NOW | 80A18040 | 0DDA 0 6914 0DD8 0 C013 | STX | 1 EMESS&2 EMESS&2 | BUILD MSG ID |
| D9F 1 C480 0E10 | LD I GETAD | | 80A18050 80A18060 | ODDC 0 8015 | LD ▲ | SIXTY | |
| DA1 1 4C88 0D93 | 8SC I LOGIT, & | 8R IF NDT RELEASED | 80A18070 | ODDD 0 1802 | SRA | 2 | |
| | * | | 80A18080 | 00DE 0 E80D | OR | KE000 | |
| | ******* | PRINT MESSAGE | 80A18090 | ODDF O DOOF | STO | EMESS&2 | |
| DDA3 0 4480 012F | LDG1 8SI I LOG | * | 80A18100 | ODEO O 10AO | SLT | 32 | RESTORE ERROR WORDS |
| DA5 1 0D72 | DC MSGAR | MSG * | 80A18110 | ODE1 1 DO00 085A | | L1 DSTE60 | |
| DA6 1 0D89 | DC LDGBY | BUSY * | 80A18120 | ODE3 1 6600 081E | | L2 DST | |
| DA7 1 ODAA | DC QLUP | TERM * | 80A18130 | ODE5 0 4480 0130 | | **** | PRINT ERROR |
| DA8 0 4C80 012D | BSC I START | and the street of | 80A18140 80A18150 | 0DE7 1 0DE0 | BS I DC | I ERRDR EMESS | MSG * |
| .55 5 .015 | * | | 80A18160 | ODE8 1 ODBC | DC | ERR8Y | 8USY * |
| | * | | 80A18170 | 00E9 1 0DEA | DC | * | * |
| DAA 1 6700 0D76 | QLUP LDX L3 MSGAR&4 | | 80A18180 | | | **** | ***** |
| DAC 0 C800 | LDD 3 0 | | 80A18190 | ODEA O 70DO | MDX | ERR1 | |
| DAD 1 4C10 0DB3 | 8SC L QLUP1,- | EXIT - ND MORE MSGS | 80A18200 | 00EC 0000 | | E 0 | |
| DAE O DOC | * | NBV6 460 === 0::==::= | 80A18210 | 0DEC 0 E000 | KEOOO DC | /E000 | HOD 15 15 |
| DAF 0 D8C4 | STD MSGAR&2 | MDVE MSG FDR OUTPUT | 80A18220 | 0DED 0 0002 | EMESS DC | 2 | MODIFIER WORD COUNT |
| D80 1 7402 ODA8 | MDX L QLUP&1,2 | | 80A18230 80A18240 | ODEE O OOOO ODEF O EOOF | DC DC | 0 /E00F | HEX OUTPUT MESSAGE ID |
| D82 0 70F0 | MDX LDG1 | GO LDG | 80A18240 80A18250 | 0DF0 0 ED00 | DC | /ED00 | DSW |
| | * | 00 00 | 80A18260 | 0DF1 0 0000 | 00 | 0 | DSW SHOULD BE |
| D83 1 6700 0D76 | QLUP1 LDX L3 MSGAR&4 | RESET CHECK AREA | 80A18270 | 0DF2 0 003C | SIXTY DC | 60 | CONSTANT |
| DB5 0 6BF5 | STX 3 QLUP&1 | | 80A18280 | | | | ****** |
| | * | | 80A18290 | | * | | |
| D86 0 4063 | 8SI HALT | CHECK IF HALT PRDG | 80A18300 | | * | | • |
| | * | | 80A18310 | | * | | |
| D87 1 4C80 0D93 | 8SC I LDGIT | RETURN TD USER | 80A18320 | | * | = = | |
| | * | | 80A18330 | | * | RE | LEASE DEVICE ROUTINE |
| NDBO 1 6600 0043 | * Incov Inv Inco | TRY ACAIN - LATER | 80A18340 | 0053 0 0000 | * | 0 | |
| DB9 1 6600 ODA3 DBB 0 7002 | LOG8Y LDX L2 LOG1 MDX LOPGO | TRY AGAIN - LATER | 80A18350 80A18360 | 0DF3 0 0000 | DROPD DC | 0 | |
| 1000 U 1002 | * MDX LUPGO | | 80A18380 80A18370 | 0DF4 1 C480 0E10 0DF6 1 4C10 0DFF | LD 85C | I GETAD | |
| | • | | 00410210 | ODEO I ACIO ODEE | 8SC | L DRPEO,~ | |

OATE EC NO. 04NDV66 15JUN68 14NDV69 20MAR70 415233 411935 431319 431320 PROG ID 080A-1 PAGE 14

DATE 04NDV66 15JUN68 14NOV69 20MAR70 EC NO. 415233 411935 431319 431320

PROG IO 080A-1 PA GE 144

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| FUNCTION TEST | | PAGE 15 | | PRDGRAM FDR THE 1800 SYSTEM | PART NO. 2196 PAGE |
|---|---|------------------------------|--------------------------------------|--|-----------------------|
| 00F8 0 C24E | 10 2 4550 057 | | 1443 FUNCTION TEST | | , AGE |
| 00F9 1 4C20 0E02 | LO 2 KEEP-DST 8SC L DRPAD,Z 8R IF NO RELEASE NDW | 80A19060 | | ********** | 80A19740 |
| , | ************************************** | 80A19070 80A19080 | | * | 80A19750 |
| 00FB 0 4480 0132 | BSI I RELDV * | 80A19090 | | * . | 80A19760 |
| 00F0 1 0811 00FE 1 080A | DRAO DC | 80A19100 | | * END DF PRDGRAM ROUTINE | 80A19770 |
| | DC TERM * | 80A19110 | | * | 80A19780 |
| | DRPED LDX L2 DRPAD | 80A19120 80A19130 | 0E2E 0 0000 | ENDIT OC O | 80A19790 80A19800 |
| OE01 0 708C | MDX LOPGO | 80A19140 | 0E2F 1 6600 081E 0E31 0 C2E4 | LOX L2 OST | 80A19810 |
| 0503 1 ((00 0015 | | 8 0A 19150 | 0E32 0 1009 | LO 2 SWO-OST SLA 9 | 80A19820 |
| 0E02 1 6600 081E (0E04 1 4C80 0DF3 | DRPAD LOX L2 DST BSC I DRDPD | 80A19160 | 0E33 0 1809 | SRA 9 | 80A19B30 |
| | ************* | 80A19170 80A19180 | 0E34 0 02E4 | STO 2 SWO-DST | 80A19840 80A19850 |
| x | • | 80A19190 | 0E35 1 C480 0E10 0E37 1 4C90 0E2E | LO I GETAD | 80A19860 |
| × | • | 80A19200 | 0E31 1 4090 0E2E | 8SC I ENOIT,- BR IF 1443 RELEASEO ************************************ | 80A19870 |
| , | DEGUSCE ASSISTED TO THE PROPERTY OF | 80A19210 | 0E39 0 4480 0132 | 8SI I RELOV * | 80A19880 |
| * | REQUEST DEVICE ROUTINE | 80A19220 | 0E38 1 0811 | ENOAD OC DOEF1 * | 80A19890 |
| | ETOE DC 0 | 80A19230 80A19240 | 0E3C 1 080A | DC TERM * | 80A19900 80A19910 |
| 0E07 1 C480 0E10 | LO I GETAD | 80A19250 | 0E3D 1 4C80 0E2E | ********* | 80A19920 |
| 0E09 1 4C28 0E13 | 8SC L GDTIT, ZE | 80A19260 | 1 4000 VEZE | 8SC I ENOIT *********************** | 80A19930 |
| 0E08 1 7401 0877 | MOX L INTSW,1 SET INTERRUPT SWITCH | 80A19270 | | * | 80A19940 |
| 0E00 0 4480 0131 | ETRN 8SI I REQOV * | 80A19280 | | * | 80A19950 80A19960 |
| OEOF 1 0E17 | DC REXIT BUSY * | 80A19290 80A19300 | | * | 80A19970 |
| | ETAD 0C 00EF1 * | 80A19310 | | * EOIT ERROR ENO ROUTINE | 80A19980 |
| 0E11 1 0878 0E12 1 080A | OC OVA * DC TERM * | 80A19320 | 0E3F 1 6500 0E45 | OENO LOX L1 OENO1 | 80A19990 |
| | ************************************** | 80A19330 | 0E41 0 6980 | STX 1 ERRIT | 80A20000 80A20010 |
| | DTIT LOX L2 DST | 80A19340 80A19350 | 0E42 1 74FF 00E0 | MOX L EMESS,-1 | 80A20010 80A20020 |
| 0E15 1 4C80 0E06 | BSC I GETOE | 80A19360 | 0E44 0 709E 0E45 1 7401 ODED | MOX ERR5 PRINT EDIT ERROR | 80A20030 |
| 0E17 1 6600 0E0D R | EVIT LOV 12 OSTON | 80A19370 | 02 17 1 1401 00ED | OEND1 MOX L EMESS,1 | 80A20040 |
| 0E19 0 70A4 | EXIT LDX L2 GETRN MDX LDPGO | 80A19380 | 0E47 0 4C80 012E | 8SC I ENO CALL END | 80A20050 |
| | *********** | 80A19390 80A19400 | | ********** | 80A20060 80A20070 |
| * | | 80A19400 80A19410 | | * | 80A200B0 |
| * | | 80A19420 | | * * | 80A20090 |
| ************************************** | DDOCDAM WALT DOUTING | 80A19430 | | * DUTPUT OATA TABLES | 80A20100 |
| * | PROGRAM HALT ROUTINE | 80A19440 | | * | 80A20110 |
| * | THIS ROUTINE CHECKS FOR | 80A19450 80A19460 | 05/0 0 000 | * | 80A20120 80A20130 |
| * | PROGRAM HALT AND WILL | 80A19470 | 0E49 0 3239 0E4A 0 1300 | BLINE DC /3239 8 I | 80A20140 |
| * | RETURN TO MAINLINE DNLY | 80A19480 | 0E48 0 2339 | 0C /1300 T | 80A20150 |
| ₩ | WHEN EITHER PROGRAM HALT | 80A19490 | 0E4C 0 2535 | 0C /2339 L I 0C /2535 N E | 80A20160 |
| * | IS OFF OR WHEN 8DTH PROGRAM HALT AND SINGLE | 80A19500 80A19510 | 05/0 0 000 | * | 80A20170 80A20180 |
| * | CYCLE ARE SPECIFIEO. | 80A19510 | 0E4D 0 0000 | BILK DC /0000 BLANK | 80A20190 |
| # A A A A A A A A A A A A A A A A A A A | | 80A19530 | 0E4E 0 2020 0E4F 0 1010 | OC /2020 MINUS DC /1010 PLUS | 80A20200 |
| | ALT DC /0000 ALT1 LDX L2 OST | 80A19540 | 0E50 0 0808 | DC /1010 PLUS DC /0808 8 | 80A20210 |
| 0E1D 0 C2E4 | ALT1 LDX L2 OST LD 2 SWO-OST | 80A19550 | 0E51 0 0404 | OC /0404 4 | 80A20220 |
| 0E1E 0 18D8 | RTE 24 | 80A19560 80A19570 | 0E52 0 0202 | OC /0202 2 | 80A20230 80A20240 |
| 0E1F 1 4C90 0E1A | 8SC I HALT,- 8R 8ACK IF ND HALT | 80A19580 | 0E53 0 0101 | * | 80A20250 |
| 0F21 0 19C1 | | 80A19590 | 0E54 0 2731 | DC /0101 1 PAR OC /2731 P.A | 80A20260 |
| 0E21 0 18C1 0E22 1 4C10 0E29 | RTE 1 8SC L HALT9,- 8R IF SINGLE CYCLE | 80A19600 | 0E55 0 2939 | OC /2939 R I | 80A20270 |
| 0E24 1 4400 00C2 | 8SC L HALT9,- 8R IF SINGLE CYCLE 8SI L ERRIT CK IF ENO ROUTINE | 80A1961 0 80A19620 | 0E56 0 1318 | DC /1318 T Y | 80A20280 80A20290 |
| * | | 80A19620 80A19630 | 0E58 0000 0E58 0 8 000 | 8SS E 0 | 80A20290 80A20300 |
| 0E26 1 6600 0E18 | LDX L2 HALT1 | 80A19640 | 0E59 0 0040 | PARK OC /8000 8AD BLANK | 80A20310 |
| 0E28 0 7095 | MDX LOPG 0 | 80A19650 | 0E5A 0 A000 | DC /0040 DC /A000 MINUS | 80A20320 |
| ** | | 80A19660 | 0E58 0 0060 | DC /0060 MINUS | 80A20330 |
| * | | 80A19670 80A19680 | 0E5C 0 9000 | OC /9000 PLUS | B0A20340 80A20350 |
| * | | 80A19690 | 0E5D 0 0050 0E5E 0 8800 | DC /0050 | 80A20350 80A20360 |
| | ALT9 SLA 1 RESTORE FOR HALT | 80A19700 | 0E5F 0 0048 | 0C /8800 8 DC /0048 | 80A20370 |
| 0E2A 0 1888 0E2B 0 02E4 | SRT 8 STO 2 SWO-OST | 80A19710 | 0 E60 0 8400 | DC /0048 DC /8400 4 | 80A203B0 |
| 0E2C 1 4C80 0E1A | STO 2 SWO-OST 8SC I HALT RETURN | 80A19720 80A19730 | 0E61 0 0044 | OC /0044 | 80A20390 |
| | NET UNIT | 00A1713U | 0E62 0 8200 | DC /8200 2 | 80A20400 80A20410 |
| | | | | | _ |
| 04N0V66 15JUN68 | 14NOV69 20MAR70 | PROG ID 080A-1 | DATE 04N0V66 15.HIN68 | | ī |
| | | | DATE 04NOV66 15JUN68 | | L. |

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|----------|-------------------------------|------------------|----------------------------------|------------|---|---|--------------|--------------------------|-----------|-------------------|---------------------------------|---|---|------------|
| IBM MAIN | TENANCE DIAGNOSTIC | PRDGRAM FOR | THE 1800 SY | STEM | | PART NO. 21963B2 | IBM MAIN | NTENANCE DIA | GNOSTIC P | ROGRAM FOR | THE 1800 SY | STEM | PART ND. 21963E PAGE 16 | |
| 1663 EUN | CTION TEST | | | | | PAGE 16 | 1443 FUN | NCTION TEST | | | | | | |
| 1445 FUN | CTION TEST | | | | • | | £ 7 7 5 1 G. | | _ | | (1.220 | • | 80A21100 | |
| (| 0E63 0 0042 | D C | /0042 | | | B0A20420 |) | 0E9D 0 133 | В | DC | /133B | Τ. | B0A21110 | |
| | 0E64 0 B100 | DC | /B100 | 1 | | B0A20430 B0A20440 | | | | * | | | 80A21120 | |
| (| 0E65 0 0041 | DC * | /0041 | | | B0A20440 B0A20450 |) | 0E9E 0 000 | 0 | ALPHA DC | /0000 | BLANK | B0A21130 | |
| (| 0E66 0 0000 | BLANK DC | /0000 | | | B0A20460 | , | 0E9F 0 010 | | DC | /0102 | 1 2 | 80A21140 | |
| | | * | , | | | B0A20470 | | 0EA0 0 030 | | DC | /0304 | 3 4 5 6 | 8 0 A2 115 0 80A2 11 60 | |
| (| 0E67 0 331B | CSTEL DC | /331B | CY | | B0A204B0 | | OEA1 0 050 OEA2 0 070 | | DC DC | /0506 /070B | 7 B | 80A21170 | |
| | 0E6B 0 3323 0E69 0 3500 | DC DC | /3323 /3500 | C L | | B0A20490 B0A20500 | | 0EA3 0 090 | | DC | /090A | 9 0 | 80A211B0 | |
| (| 0E6A 0 1213 | DC | /1213 | ST | | B0A20510 | 1 | 0EA4 0 000 | | DC | /0000 | BLANK | 80A21190 | |
| • | 0E6B 0 3531 | DC | /3531 | ΕA | | B0A20520 | | OEA5 0 003 | | DC | /0031 | A . | 80A21200 80A21210 | |
| | 0E6C 0 2300 | DC | /2300 | L | | B0A20530 | | OEA6 0 323 OEA7 0 343 | | DC DC | / 3233 /34 3 5 | B C D E | 80A21210 | |
| (| 0E6D 0 2739 | * | /2739 | ΡĪ | | 80A20540 B0A20 550 | | 0EAB 0 363 | | DC | /3637 | F G | B0A21230 | |
| | 0E6E 0 3322 | DC DC | /3322 | c ĸ | | B0A20560 | • | 0EA9 0 3B3 | | DC | /3839 | н і | B0A21240 | |
| (| 0E6F 0 2014 | DC | /2014 | - ü | • | B0A20570 | | OEAA 0 212 | | DC | /2122 | J K | 80A2125 0 B0A21260 | |
| (| 0E70 0 2700 | DC | /2700 | Р | | B0A205B0 | | 0EAB 0 232 | | DC DC | /2324 / 2 526 | L M N D | 80A21270 | |
| <i>e</i> | 0571 0 2/20 | * | (2/20 | 0.0 | | BOA20590 BOA20600 | | OEAC 0 252 OEAD 0 272 | | DC | /2728 | PQ | 80A212B0 | |
| (| 0E71 0 3429 | DROP DC DC | /34 2 9 /26 2 7 | 0 R D P | | 80A20610 | | OEAE 0 291 | | DC | /2912 | R S | BOA21290 | |
| | 0E72 0 2627 | * | 12021 | UF | | B0A20620 | | 0EAF 0 131 | | OC. | /1314 | T U | 80A21300 | |
| | 0E73 0 0009 | CSEOB DC | /0009 | 9 | | B0A20630 | | 0EBO 0 151 | | OC. | /1516 | V W | 80A21310 | |
| | 0E74 0 000A | CSE09 DC | /000A | o | | 8 0 A20640 | | 0EB1 0 171 0EB2 0 190 | | DC DC | /171B /1900 | X Y Z BLANK | BOA21320 80A21330 | |
| | 0E75 0 0001 | 00 | /0001 | 1 | | B0A20650 | | 0EB3 0 000 | | DC | /0000 | BLANK | 80A21340 | |
| | 0E76 0 0002 0E77 0 0003 | DC 0 C | /0002 /0003 | 2 | | 80A20660 B0A20670 | | 0EB4 0 103 | | DC | /1030 | & AMP | B0A21350 | |
| | 0E78 0 0004 | DC | /0004 | 4 | | 80A206B0 | | 0EB5 0 201 | | DC | /2011 | - / | 80A21360 | |
| | 0E79 0 0005 | DC | /0005 | 5 | | 80 A2069 0 | | 0EB6 0 1A3 | | 0C | /1 A 3 A | PCT LOS | 80A21370 | |
| | 0E7A 0 0006 | OC. | /0006 | 6 | | B0A20700 | | 0EB7 0 2A0 0EB8 0 1B3 | | DC DC | /2A0B /1B3B | NOS # | 80A213B0 B0A21390 | |
| | 0E7B 0 0007 | DC | /0007 | 7 B | | B0A20710 8 0 A2 0 7 2 0 | | 0EB9 0 2B0 | | DC | /1838 /280C | \$ AT | 80A2140 0 | |
| | 0E7C 0 000B 0E7D 0 0009 | OC DC | /0008 /0009 | 9 | | B0A20730 | | 0EBA 0 1C3 | | DC | /1C3C | % 🖪 | 80A21410 | |
| | 0210 0 0009 | * | ,000, | • | | B0A20740 | | OEBB 0 2C0 | | DC | /2COD | * APOSTROPHE | B0A21420 | |
| | 0E7E `0 1626 | WCCOR DC | /1626 | ₩Ď | | 80A20750 | | 0EBC 0 103 | | 0C | /1 D3D | UDR CNT EXC GTR | 80A21430 B0A21440 | |
| | 0E7F 0 2912 | DC | /2912 | Ŗ S | | B0A20760 | | OEBD 0 2D0 OEBE 0 1E3 | | DC DC | /2D0E /1E3E | COL LES | B0A21450 | |
| | 0EB0 0 1300 0E81 0 3331 | DC 0 C | /1300 /3331 | ĊA | | 80A20770 80A207B0 | | 0EBF 0 2E0 | | DC | /2E0F | SMI QST | B0A21460 | |
| | 0E82 0 1235 | DC | /1235 | ŠĒ | | B 0 A20790 | | 0ECO 0 1F3 | 3F | , OC | /1 F3F | QTE DR | 80A21470 | |
| | 0EB3 0 0033 | DC | /0033 | С | | B0A20B00 | | 0EC1 0 2F0 | 00 | DC | /2F00 | NOT BLANK | 80A21480 80A21490 | |
| | 0EB4 0 2629 | DC | /2629 | DR | | B0A20810 | | 0562 0 203 | 20 | * STRSS OC | /3020 | £ - | 80A21490 80A21500 | |
| | 0EB5 0 3500 | , DC | /3500 | E | | B0A20B20 B0A20B30 | | 0EC2 0 302 0EC3 0 011 | | DC | /0111 | 1 / | 80A21510 | |
| | 0EB6 0 3100 | WCCA OC | /3100 | Α | | B0A20B40 | | 0EC4 0 312 | | DC | /3121 | A J | B0A21520 | |
| | 06B7 0 3200 | WCCB DC | /3200 | В | | BOA20B50 | | 0EC5 0 021 | | OC. | /0212 | 2 S | B0A21530 | |
| | | * | | | | B0A20B60 | | 0EC6 0 322 | | DC | /3222 | B K 3 T | 80A21540 80A21550 | |
| | OEBB O 2A2A | AWORK DC | /2A2A | # # | | B0A20B70 | | 0EC7 0 031 0EC8 0 332 | | DC DC | /0313 /3323 | CL | B0A21560 | |
| | 0E89 0 2A15 0E8A 0 2A2A | DC DC | /2A15 /2A2A | # V # # | | 80A20BB0 B0A20890 | | 0EC9 0 041 | | DC | /0414 | 4 Ü | B0A21570 | |
| | 0E8B 0 152A | oc oc | /152A | v # | | 80A20900 | | OECA 0 342 | | DC | /3424 | D M | BOA21580 | |
| | 0E8C 0 1515 | DC | /1515 | V V | | 01002408 | | OECB 0 051 | | 0 C | /0515 | 5 V | 80A21590 | |
| | OEBD 0 152A | DC | /152A | V # | | 80A20920 | | 0ECC 0 352 0ECD 0 061 | | DC DC | /3525 /0616 | E N 6 W | B0A21600 80A21610 | |
| | OEBE 0 1515 | DC | /1515 | V V | | 80A20930 8 0 A2094 0 | | 0ECE 0 362 | | DC | /3626 | F D | B0A21620 | |
| | 0EBF 0 2A15 | 0 C | /2A15 | # V | | 80A20950 | | 0ECF 0 071 | | DC | /0717 | 7 X . | 80A21630 | |
| | 0E90 0 3B38 | BWDRK DC | /3B3B | нн | | 80A20960 | | 0EDO 0 372 | | o C | /3727 | G P | 80A21640 | |
| | 0E91 0 3B07 | DC | /3807 | н 7 | | B0A20970 | | 0ED1 0 081 | | DC | /0B18 | 8 Y H Q | 80A21650 B0A21660 | |
| | 0E92 0 3B3B | DC | /3838 | н н | | 8 0A2 0980 B0A2 0990 | | 0ED2 0 3B2 0ED3 0 091 | | OC DC | /3B28 /0919 | 9 Z | 80A21670 | |
| | 0E93 0 0738 | DC | /073B /0707 | 7 H 7 7 | | B0A21000 | | 0ED4 0 392 | | OC. | /3929 | I R | BOA216BO | |
| | 0E94 0 0707 0E95 0 073B | DC O C | /0738 | 7 H | | B0A21010 | | 0E05 0 0A1 | | DC | /0A1A | 0 % | B0A21690 | |
| | 0E96 0 0707 | oc | /0707 | 7 7 | | B0A2102 0 | | OED6 0 3A2 | | DC | /3A2A | ´ 🖸 # | 80A21700 | |
| | 0 E 97 0 3B 0 7 | DC | /3807 | н 7 | | B0A21030 . | | 0ED7 0 0B1 | | DC | /0B1B | # • · · · · · · · · · · · · · · · · · · | B0A21710 80A21720 | |
| | 25.20 0 25.25 | * | 12525 | . | | B0A21040 | | 0ED8 0 3B2 0E09 0 0C1 | | DC DC | /3B2B /0C1C | • \$ • ¤ | 80A21720 | |
| | 0E9B 0 3525 0E99 0 3400 | EOT DC OC | /3525 /3400 | E N D | | BOA21050 80A21060 | | 0EDA 0 3C2 | | DC | /3C2C | u * | B0A21740 | |
| | 0E9A 0 2636 | DC | /2636 | 0 F | | 80A21070 | | OEDB 0 OD1 | | DC | /0010 | . 8 | B0A21750 | |
| | 0E9B 0 0013 | DC | /0013 | T | | 80A21080 | | | | * | / | 6 11 | B0A21760 | |
| | 0E9C 0 3512 | DC | /3512 | E S | | B0A21090 | | 0E0C 0 333 | 3B | CHARC OC | /3338 | СН | B0A21770 | |
| | | | | | | | | | | | | | | |
| DATE | 04NDV66 15JUN6 | | 20MAR70 | | | PRDG IO OBOA-1 | OATE | 04N0V66 | 15JUN6B | 14N0V69 431319 | 20MAR70 431320 | | PRDG IO OBOA PAGE 1 | 1-1 16A |
| EC ND. | 415233 411935 | 5 431319 | 431 320 | | | PAGE 16 | EC ND. | 415233 | 411935 | 731317 | 731320 | | 100 | |

| M MAI | NTENANCE OLAGNOST | IC PROGRAM | FOR TH | IE 1800 SY | STEM | PART NO. 2196382 |
|-------|----------------------------|------------|----------|----------------|------------------|----------------------|
| 3 FU | NCTION TEST | | | | | PAGE 17 |
| | OEDD 0 3129 | | DC | /3129 | A R | 80A21780 |
| | OEDE 0 3133 | | DC | /31 3 3 | A C | 80A21790 |
| | OEDF 0 1335 | | DC | /1335 | ΤE | 80A21800 |
| | 0EEO 0 2900 | | DC | /2900 | R | 80A21810 |
| | 0EE1 0 33 26 | | DC | /3326 | C O | 80A21820 |
| | 0EE2 0 2427 | | 0C | /2427 | M P | 80A21830 |
| | OEE3 0 2339 | | DC | /2339 | Ł I | 80A21840 |
| | 0EE4 0 2435 | | 0C | /2435 | M E | 8 0 A21850 |
| | 0EE5 0 2 513 | | DC | /2513 | NT | 80A21860 |
| • | 0554 0 0005 | * | 00 | 10005 | | 80A21870 |
| | 0EE6 0 2935 | REGIS | | /2935 | RE | 80A21880 |
| | 0EE7 0 3739 | * | DC | /3739 | G I | 80A21890 |
| | OEE8 0 1213 | * | D.C | /1212 | £ T | 80A21900 |
| | 0EE9 0 2931 | | DC DC | /1213 /2931 | S T R A | 80A21910 80A21920 |
| | OEEA 0 1339 | | DC | /1339 | ΤÎ | 80A21920 80A21930 |
| | 0EE8 0 2625 | | DC | /2625 | 0 N | 80A21940 |
| | | * | | ,2025 | O N | 80A21950 |
| | OEEC 0 3838 | AITCH | DC | /3838 | нн | 80A21960 |
| | | * | | | | 80A21970 |
| | OEED 0 1213 | STRES | DC | /1213 | S T | 80A21980 |
| | OEEE 0 2935 | | OC. | /2935 | R E | 80A21990 |
| | OEEF 0 1212 | | DC | /1212 | S S | 80A22000 |
| | | * | | | | 80A22010 |
| | OEFO 0 1222 | SKAP | DC | /1222 | S K | 80A22020 |
| | OEF1 0 3927 | | DC | /3927 | I P | 80A22030 |
| | 0EF2 0 0031 | AFTER | | /0031 | A | 80A22040 |
| | 0EF3 0 3613 | | 0C | /3613 | F T | 80A22050 |
| | 0EF4 0 3529 | | DC | /3529 | E R | 80A22060 |
| | 0EF5 0 0027 | | DC | /0027 | P | 80A22070 |
| | 0EF6 0 2939 | | DC | /2939 | R I | 80A22080 |
| | 0EF7 0 2513 | | DC | /2513 | | 80A22090 |
| | 0EF8 0 1222 | * SKIM | DC | /1 222 | SKIP IMMEDIATE | 80A22100 |
| | 0EF9 0 3927 | SVIM | 0C | /1222 /3927 | SKIP IMMEDIATE | 80A22110 |
| | 0EFA 0 0039 | | 00 | /0039 | | 80A22120 80A22130 |
| | 0EFB 0 2424 | | DC | /2424 | | 80A22140 |
| | 0EFC 0 3534 | | DC | /3534 | | 80A22150 |
| | 0EFD 0 3931 | | OC | /3931 | | 80A22160 |
| | OEFE 0 1335 | | DC | /1335 | | 80A22170 |
| | | * | - | | | 80A22180 |
| | 0EFF 0 3535 | E | 0C | /3535 | | 80A22190 |
| | | * | | | | 80A22200 |
| | 0F00 0 1227 | SPIM | OC | /1227 | SPACE IMMECIATE | 80A22210 |
| | OFO1 0 3133 | | DC | /3133 | | 80A22220 |
| | 0F02 0 3500 | | DC | /3500 | | 80A22230 |
| | 0F03 0 3924 | | OC | /3924 | | 80A22240 |
| | 0F04 0 2435 | | DC | /2435 | | 80A22250 |
| | 0F05 0 3439 | | DC | /3439 | | 80A22260 |
| | 0F06 0 3113 | | DC | /3113 | | 80A22270 |
| | 0F07 0 3500 | مدن | oc | /3500 | | 80A22280 |
| | 0500 0 2222 | * | 0.0 | 40000 | 611411151 | 80A22290 |
| | 0F08 0 3338 | CNNL | DC | /3338 | CHANNEL | 80A22300 |
| | 0F09 0 3125 | | 0C 0C | /3125 | | 80A22310 |
| | 0F0A 0 2535 | | | /2535 | | 80A22320 |
| | OFOB 0 2300 OFOC 0 0000 | | OC DC | /2300 /0000 | | 80A22330 |
| | 0F0C 0 0000 | | DC | /0000 | | 80A22340 80A22350 |
| | 0.00 0 0000 | * | 50 | , 0000 | | |
| | OFOE 0 1227 | * SPCC | DC | /1227 | SPACE | 80A22360 80A22370 |
| | 0F0F 0 3133 | 3500 | DC | /1227 | STACE | 80A22380 |
| | 0F10 0 3500 | | 0C | /3133 | | 80A22390 |
| | 0F10 0 3500 0F11 0 0000 | | DC | /0000 | | 80A22400 |
| | 0F12 0 0000 | | DC | /0000 | | 80A22410 |
| | 0F13 0 0000 | | oc oc | /0000 | | 80A22420 |
| | 0. 25 0 0000 | * | 50 | , 0000 | • | 80A22420 |
| | | * | | | | 80A22440 |
| | 0F14 0093 | 8ITS | 888 | 147 | 1443 OUTPUT AREA | 80A22450 |

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM 1443 FUNCTION TEST

> ************ 8EGIN ROUTINE. OFA7 0 4480 012C PRCUS 8SI I BEGIN OC PIO OFA9 1 07FF ******* PATCH AREA OF AA 0000 8\$\$ E 0 ORG PEND OC OFFD /7FE&PID O PRCUS OFFD 0 0000 OFFE OFA7

EN0 NO STATEMENTS FLAGGED IN THE ABOVE ASSEMBLY

80A22460 80A22470 80A22480 80A22490 80A22500

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80A22510 80A22520 80A22530 80A22540 80A22550

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OATE EC NO.

415233 411935

431319 431320

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1443 FUNCTION TEST

```
1443 FUNCTION TEST
         AFTER OEF2 OAF9
         AGAIN 0894 0806 0807 08A7
         AGIN1 0897 0894
         AGIN2
                089C
                       089F
         AITCH OEEC
                       0A52 0A5B
         ALL
                 0B6B
         ALPHA OE9E OA3B
         AWDRK 0E88 0A17
         RΔR
                0814
         BASIC 086A
         BEGIN 012C OFA7
               0E4D 0965
         BITS
                0F14
                       085C 0912 0918 0933 0969 0A1B 0A3F 0A56 0A5B 0A7A 0A7D 0A9D 0AA0
                       OAB5 OAE7 OB23 OB43 OB4E OB50 OB58 OB85 OB93 OB95 OB9D OBCC OBFD
                       OC28 OC2B OC35 OC37 OC3A OC3F OC44.OC48 OC4A OC4C OCBD OCCO OCC3
                       OCD1 OCD7 OCED OCFB
         BLANK 0E66 08FF 0996 0C10
         BL INE
                0E49
                      095E
         BLNCT 0995 098B 09B7
         BWORK 0E90
                       042F
         CHAN OBAC OB3F OB48 OB4C OB55 OB5D OB61 OBDA
         CHAN1 OBAF OBD9
         CHARC OEDC 0A34
                       0923 093C 0950 0979 09A6 09D4 0A02 0A72 0A90 0ADB 0B15 0BC6 0BEE
                       OC88 OCA1 0049
         CKPT1 OD3E OD4E OD5B
         CKPT3
                OD49 OD5A
         CKPT7
                OD4B
         CKPT8
                0D5B
         CKXFR
                       0976 09A3 09D1 09F6 0A6F 0A8D 0AD8 0B12 0BC3 0BEB 0C88 0D24
                0D14
         CKXF1 0D19 0D29 0D36
         CKXF3
                0D24 0D35
         CKXF7
                0D26
                      0D1F
         CKXF8
                0D36 0D28
                0F08
                      OC1A
                       08D7 094B 0AC4 0AE4 0AE6 0AFE 0820 0B22 0B3B 086D 0B72 0BA4 0BCE
         CNTRL
                085A
                       OBDO OBFF OCO1 OC80 OC99
                0810
         CSE08
                0E73 09C9
         CSE09
                0E74
                      09EE
         CSTEL
                0E67 09C2 09E2
         CYCNT
                      08E7 092D 0942 0956 096C 097F 098F 09B2 09DA 0A08 0A42 0A55 0A96
                       OAB8 OACA OAEC OBO4 OB29
                       08C6 08CB 0DFD 0E10 0E3B
                0811
                0812 08C0 08C3
         DDEF2
                OCF7 OCFO
         DECXO
         DEND
                0E3F
                      08C7
         DEND1
                0E45 0E3F
                ODFD
         DRAD
                      08CF
         DROP
                0E71 09E7
         DROPD
                      08DE 090B 0A76 0C8D 0DC3 0E04
                ODF 3
         DRPAD
                OEO2 ODF9 ODFF
         DRPED
                ODFF
                      081E 089C 08BA 08BC 08CO 08C6 08D5 08D6 08D7 08D8 0BD9 08DA 08DB
                       08DC 080D 08E0 08E9 08EA 08EB 08EC 08ED 08F0 08F9 091A 091B 091C
                       0925 0928 094A 094B 0967 098A 098E 098F 09AD 09F8 09FB 09FE 0A00
                       0A19 0A3D 0A42 0A4D 0A54 0A55 0A60 0A64 0A66 0A67 0A68 0A7C 0A82
                       OA83 OA86 OA9F OAB3 OAB8 OAC3 OAC4 OAC5 OAC6 OAC9 OACA OACB OAE4
                      OAE5 OAE6 OAEB OAFD OAFE OAFF OBOO OBO3 OBO4 OBO5 OB20 OB21 OB22 OB27 OB28 OB3A OB3B OB40 OB56 OB57 OB6C OB6D OB71 OB72 OB92 OB98 OB9C OBA3 OBA4 OBB8 OBB9 OBBA OBBE OBC1 OBCE OBCF OBDO OBF3 OBFF OCOO OCO1 OC12 OC13 OC27 OC2A OC30 OC47 OC55 OC56 OC59 OC5C OC60
                       OC6A OC7F OC8O OC96 OC97 OC9B OC99 OC9A OCAD OCAE OCAF OCBO OCB1
                       ODOO ODO3 ODO5 ODOD ODOE OD15 OD17 OD18 OD10 OD1E OD21 OD2E OD2F
                       0D31 0D32 0D3B 0D3C 0D40 0D42 0D43 0D46 0D53 0D54 0D56 0D57 0D97
                       0098 OD9B ODCB ODD1 ODD2 ODD7 ODE1 ODE3 ODF8 OE02 OE13 OE1B OE1D
                       0E2B 0E2F 0E31 0E34
```

```
DSWC
       084F 088F
DSWO
       0852
            0A00 0D32
DSW1
       0822
DSW2
       0826
DSW3
       082A
DSW4
       082E
       0832 0AC9 0AEB 0B03 0B27
DSW5
DSW6
       0836
       083A
            OBAF OBDF
DSW8
       083E
DSW9
       0842 09F8 09FB 09FE
DVA
       0878
            08D6 0E11
       OEFF
FIGHT
       0A21
EMESS
       ODED
            ODD9 ODDA ODDB ODDF ODE7 0E42 0E45
END
            08C9 090D 0E47
ENDAD
       OE3B
            0801
ENDIT OE2E
            0808 0E37 0E3D
EOT
       0F98
            0904
EPARK 09BE
            09BA
FRRRY
      ODBC ODE8
ERRIT
             0929 093E 0952 097B 09A8 0906 0A04 0A92 0ADD 0B17 08C8 08F9 0C68
             OCA3 ODC6 ODD5 0E24 0E41
ERROR
       0130
            ODE5
FRR1
       0DC8
            ODEA
ERR2
       ODCB
            ODDO
ERR4
       0 D D 7
             ODCE
ERR5
             00BC 0E44
       ODE3
FIVE2
       OABB
            OAB7
            0940 0AD2 0B0C 0B6F 0BB5 0BE5 0C82 0CAA
FORMS 0C95
       OCE9 OCE4 OCF8
GET
GETAD
            08CD 0D9F 0DC4 0DF4 0E07 0E35
      0E10
GETOE 0E06 08D3 0C57 0E15
GETRN
      0E0D 0E17
GDTIT 0E13 0E09
HALT OE1A ODB6 OE1F OE2C
HALT1 0E18 0E26
HALT9 0E29 0E22
HDNG
       OC7B
            0906 0960 098C 09C4 09E9 0A12 0A29 0A36 0A4B 0AAC 0AC1 0AFB 0B33
IMSP1 0874
            OAC3
INTRE 088E
            0881 0889
INTRP
      0879
             0892
INTRR 0890
            0880
INTRX 0892
            0885
       0886
INTSW
      0877
            0891 0F0R
KAOOO
      0D92
            0D66
KEEP 086C
            08A0 0A64 0A82 0C6A 0DF8
KEOOO ODEC ODDE
KOOOC
      086E
            0880 0888 08D8 0AE5 0B21 0B3A 0B40 0B56 0B92 0B9B 0BCF 0C00 0C96 0CAD 0D15 0D1E 0D2F 0D31 0D43 0D54 0D56
K0100
      0864
K0200
            0804
      0863
            08D5 0C55 0D3B
K0400
LAST
       08B9
            086B
LOG
       012F
LOGBY
            ODA6
            092B 0940 0954 097D 09AA 09D8 0A06 0A94 0ADF 0B19 0BCA 0BFB 0C6D
             OCA5 ODA1 ODB7
LOGI
       0DA3
            ODB2 ODB9
LOPGO
       ODBE
            OC79 OD38 OD5D ODBB OE01 OE19 OE28
LXR1
       OCE 5
            OCF9
LXR2
       OCDF
            OCDE
MASK
       0B69 08ED
MLSCF 0809 08A3 0DBE
```

DSWA

1443 FUNCTION TEST

IBM MAINTENANCE DIAGNOSTIC PROGRAM FOR THE 1800 SYSTEM

0800 08A5 08F0 08F1 08F5 0C12 0D97

RPCNT 081F 0ACB 0AE1 0B05 0B1B 0B28 0BAD 0BD7 0BDD 0C07

ROTA OCB9 096E 0AA4 OCCA

RTABL 08A9 086B 08F7 08FA

090F 08A9 092F

ROTAL OCCO OCC7

ROTA2 OCC8 OCBA

RSTWC OCFA OCD5

RTZZZ 08FC 08B9

RTZ1 0912 0915

RT 0A 0A46 08B3

RTOAA OA60 OAA6

RTOAB OA7A OA8O

RTOAC OA9D OAA3

RTOAD 0A9B 0A98

RTOAI 0A51 0A4E

RTOAJ OASE OASA

RT 0D3, 0B05 0B10

RTOD4 OBO8 OB2B

0B64

0932

RT01A 0935 0944

0AA7 08B4

OARC 0885

0AF1 08B6

0B2F 08B7

095B 08AC

0984 **0**8AD RT04C 09B7 09B4

0888

AA80

0947 08AB 0958

RT03A 096E 0981 0A1D 0A43 0AB9

OAE3 OAEE

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```
1443 FUNCTION TEST
        MOVE 0C2F 0ACC 0B06 0B1E 0BD1 0BD2 0BD3 0BD4 0C02 0C03 0C04 0C05 0C4E
        MOVE4 OC47 OC3D
        MOVE5 0C4C 0C42
        MOVE6
              0C4E 0C46
        MSGAR 0D72 0897 08E2 0C8F 0D60 0D94 0DA5 0DAA 0DAF 0D83
              ONECH
              086D 0A7C 0A9F
        ONL IN
              080F 0A61 0A74
        PACNT
              099B 0992 09AC 09AE 09B9
        PAR
              0E54 0987
              0E58 0990 09BE
              08E0 0930 0945 0959 0982 09B5 09DD 0A0B 0A99 0AEF 0B2C 0862 0BAA 0DD3
        PCON
        PEND
              OFFD 0808
        PID
              07FF 0FA9
        PRCUS OFA7 OFFE
       PRDSW
             0860 0887 088C 0C97 0CAE 0D42 0D46
       PRINT OCAC 0920 0939 0973 09A0 09CE 09F3 0A6C 0A8A 0AD5 0B0F 0B8C 0BE8 0C85
                   0909 091E 0936 0948 0971 099E 09CC 09F1 0A6A 0A88 0ACF 0B09 086A
                    OBB2 OBE2 OBF1 OC75 OC7D OCA8
       PTRY1 0C55
       PTRY2 0C5C 0C77
       PTRY3 0C5E 0C54
       PTRY4 0C70 0C51 0C52 0C64
       PTRY9 0C77 0C68
       PUT
             OCE8 OCD3 OCD9 OCDA
             OD5E OBF5 OC5A OC72 OC9C OCB3 OD22 OD47 OD70
       QL D G
       QLOG1
             0D60
                   08E4 0C91 0D62 0D96
       QLOG2 OD6E OD5F OD65 OD6A OD6C
       QLUP
             ODAA ODA7 ODBO ODB5
       QLUP1 ODB3 OD99 OD9D ODAD
       RΔD
             0801 08F9
       REGIS OEE6
                   0A49
       RELDV 0132 ODFB 0E39
       REQDV 0131 0E0D
REXIT 0E17 0E0F
```

```
RT05 09BF 08AE
RTO5A O9CB
RT 06
      09DF 08AF
RT06A 09F0 0A0A
RT 07
      OAOD OBBO
RT07B 0A19 0A30
RT08 0A1F 08B1
RT09 0A31 08B2
RT413 0990 09BD
SBANA OCFF OBF7 OC61 OC9E OCB5 OD0A OD12 OD23 OD30 OD48 OD55
SBANQ 0866 0D03 0D05 0D0E
SEBIT OCCC 08FC 0901 095B 0962 0984 0993 0998 098F 09C6 09DF 09E4 09EB 0A0D
            OA14 OA1F OA24 OA2B OA31 OA38 OA46 OA4F OAA7 OAAE OABC OAF1 OAF6
            SEBOT OCF1 OCCD OCCE
SENSD 0861 087A 08DD 0BF3 0D2E 0D53
SENSO 085F 08DB 0C59 0C60 0C9A 0CB1
SETIT 0C0C 0AC7 0B01 0B35 0B40 0B77 0B7F 0C20
SETPA 0993 09B1 09BB
SETT1 OC1D OC15
SETT2 OC22 OC1C
SHAN OBDC OB76 OB7E OB89 OB8D OB91 OB9A OBA2 OBA8 OCOA
SHAN1 OBDF OCO9
SIXTY ODE2 ODDC
SIX8
      0Δ45 0Δ41
SIZE
      0813 0967 098E 0A19 0A3D 0A4D 0A54 0AB3
SKAP
      0EF0 0B67
SKIM
      0EF8 0B31
SLASH 0875 0C27 0C47
SPAC1 086F 094A
SPAC2 0870
SPAC3 0871 0B6C 0C7F
SPCC OF OE
           0020
SPIM OFOO OABF OAF4
START 012D 0DA8 0DC0
STARX 08BA 08A1
STAR1 08C6 08BE 08C1
STAR2 08CO 08C5
STEP 0876 0AC6 0AE9 0B00 0B25 0B38 0B7A 0B82 0C30
STOLX OCDE OCFE
STRES OEED OAAA
STRSS OEC2 OAB1
SWCMP 0862 08EA
     SW1
      0803 08E9 0DD1
SW2
SW3
      0805
TERM
      080A 098A 09AD 0A60 0A66 0BB8 0C13 0CE2 0D0D 0DFE 0E12 0E3C
WACNT 0821 0C56 0C66 0017 0D26 0D3C 0D4B
WCCA
     0E86
WCCB
     0E87 0A27
WCCOR OE7E OA1O OA22
WRITE 085C 08D9 091B 091C 0925 0928 0A67 0A68 0A83 0A86 0BB9 0BBA 0BBE 0BC1
            OCBO
WRSK1 0873 0871 08A3
WRSP1 0872 0AFD
XFDSW 085E 087F 0884 0C98 0CAF 0D1D 0D21 -
END OF ASSEMBLY
```

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RTZ

RTOB

RTOC

RTOD

RT OE

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RT01

RT 02

RT03

RT04

RT OC 3 OA CB

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